

HIV, HEPATITIS, STDs, AND RELATED RISK
BEHAVIORS AMONG YOUNG WOMEN
RESIDING IN LOW INCOME NEIGHBORHOODS
IN NORTHERN CALIFORNIA
April 1996 – January 1998



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INTRODUCTION

In the United States, acquired immunodeficiency syndrome (AIDS) is the fourth leading cause of death for women aged 24 to 44 years.¹ Among women, AIDS has disproportionately affected African Americans and Latinas.²⁻⁴ The greatest increases in AIDS incidence rates were observed in heterosexually infected women born between 1970 and 1974.¹ In 1995, women accounted for 19% of adult AIDS cases in the U.S.. From 1984 to 1992, a 31% increase of sexually transmitted disease (STD)-related deaths occurred among women, primarily as a result of sexually transmitted human immunodeficiency virus (HIV).⁵

In California, as of May 30, 1998, 106,208 adult/adolescent AIDS cases had been reported to the Department of Health Services Office of AIDS (OA).⁶ Women represented 6.7% (n=7,078)⁶ of all reported AIDS cases. Heterosexual contact is the leading HIV transmission route for women and accounts for 43% of all female AIDS cases followed by injection drug use (39%).⁶ Although women aged 18 to 29 years accounted for only 15.9% of the California female population in 1996,⁷ they represented 21.5% (n=1,426) of cumulative female AIDS cases through diagnosis year 1996.

There are few investigations of the possible relationship between socioeconomic status and HIV risk. Some studies have reported that low income status is related to HIV infection and AIDS.⁸⁻¹¹ Murrain and colleagues investigated the relationship between indicators of socioeconomic status and HIV prevalence in Massachusetts using seroprevalence data from publicly funded test sites and found that homeless persons and those who had no insurance or were Medicaid recipients had higher rates of HIV infection; residents of low income ZIP codes in Massachusetts were four times more likely to have high seroprevalence rates among persons voluntarily tested for HIV.¹² Simon and colleagues examined the relationship between income and AIDS rates in Los Angeles County by race/ethnicity and found that AIDS rates were highest among residents of low income areas (252.8 per 100,000) and lowest among residents of high income areas (82.0 per 100,000). Residents of low income areas accounted for 78% of AIDS cases among blacks, 67% among Hispanics, and 47% among whites.¹³

From June 1990 to January 1993, a group of researchers interviewed 2,898 persons 18 or older reported with AIDS in 11 U.S. state and city health departments to characterize their socioeconomic status.⁹ Overall, 90% of the women were unemployed. Among female intravenous drug users, differences in household income by race and ethnicity were marked: 71% of white and 91% of black females reported a household income under \$10,000. Almost one-third (29%) of white women and 63% of black women had not completed 12 years of school.

It has been difficult to conduct representative surveys measuring both STD/HIV prevalence and behavioral data. A recent survey reported that American women had a much greater cumulative incidence of STDs (15%) compared to 5.7% among British women.¹⁴ Researchers assessed knowledge regarding STD spread and prevention; on average, women who reported prior treatment for STD infection, only 60% reported receiving any information regarding prevention of reinfection during the course of treatment, and 6.8%-42.9% did not know the disease they were being treated for was sexually transmitted.¹⁵

STDs in adolescents and young adults in the U.S. are common. Scientists from the Centers for Disease Control and Prevention (CDC) investigated *Chlamydia trachomatis* infection as part of the National Health and Nutrition Examination Survey III (NHANES III) and found 13% prevalence of infection among African Americans, 11% among Mexican Americans, and 5% among whites.¹⁶ A recent study documented the prevalence of STDs in low-income, pregnant Mexican American women: 10.1% were positive for chlamydia, 1.2% for gonorrhea, and 0.3% for syphilis.¹⁷

Most (71%) of the variation in syphilis rates among U.S. counties is accounted for by sociodemographic characteristics (i.e., black population, county location in the South, percentage of births to women younger than 20 years).¹⁸ In urban Seattle, the low socioeconomic status group (according to census tracts) represents 25.5% of the population, yet this group accounted for 58% of the gonorrhea cases reported; the annual incidence per 100,000 population for blacks was 3,033, Hispanics, 617, and whites 121.¹⁹

Population-based surveys provide the most generalizable data regarding risk behaviors and disease seroprevalence. The Young Women's Survey was a population-based, door-to-door survey of young women aged 18 to 29 years, who resided in low-income neighborhoods within five California counties. The purpose of our study in this population was twofold: 1) to estimate the prevalence of important infectious diseases including HIV, chlamydia, gonorrhea, hepatitis B, hepatitis C and herpes simplex type 2, and 2) to examine the association of specific sexual and injection/non-injection drug using behaviors with the prevalence of the infections. This information will be useful in developing prevention strategies to combat the spread of the disease in this population.

METHODS

Site Selection

The selection of sites for the survey was made using the following data:

- 1) AIDS incidence rates among women aged 18 to 29 years for 1992, 1993, and 1994, using 1990 census data.
- 2) HIV rates per 10,000 newborns in the survey of childbearing women for 1992 and 1993.
- 3) Percent HIV positive among women attending STD clinics in 1992.
- 4) Delivery rates among teenagers in 1993, using 1990 census data.
- 5) Syphilis rates among teenagers in 1993.
- 6) Number of injection drug users (males and females) in 1992.
- 7) Number of HIV positive women in alternative test sites in 1994.

Based on these data, five local health departments (LHDs) were invited to participate in the Young Women Survey (YWS): Alameda County, Contra Costa County, City and County of San Francisco, San Joaquin County, and San Mateo County.

Coordination

Approximately six months prior to the start of data collection, OA organized and facilitated monthly coordinating meetings. These meetings included OA personnel, the Director of the Universitywide AIDS Research Program, and the principal investigators from each of the five LHDs. Field workers subsequently hired through the LHDs were strongly encouraged to attend these meetings and share their experiences and recommendations. The initial meetings focused on recruitment strategies, sampling, and other methodological issues. As the YWS progressed, these meetings allowed for information sharing (e.g., available training, latest research on women's health issues) and updates on the progress sites were making toward the project objectives. Decision-making and problem solving were conducted by consensus at all the coordinating meetings.

Study Population

The inclusion criteria for the study population were as follows:

- women;
- aged 18 to 29 years;

- English or Spanish speaking; and
- residents of dwellings within census block groups with median household income below the 10th percentile (this percentile was chosen to allow sufficient sample size in each county).

“Woman” was defined by the potential participant; male-to-female transgendered persons were eligible for inclusion in the YWS (these data were distinguished in the analyses). Age was established by field staff asking women if they were between the ages of 18 to 29 years; confidentiality considerations did not allow us to verify the date of birth from traditional forms of identification. In cases where women appeared to fall outside the age criteria, the field workers attempted to confirm eligibility by asking for date of birth. Ultimately, age eligibility was based on the field workers’ discretion and judgment. “Residency” was defined as staying at a dwelling the previous night, and having no other home. “Dwelling” was broadly defined, and included single resident occupancy units within hotels and makeshift shelters. As such, “squatters” found in abandoned buildings were considered residents if they stayed at such locations “last night.” In contrast, homeless persons encountered on the streets were not considered residents.

Field Workers

All but one participating LHD employed women as field workers. For the most part, field workers had experience in women’s health, outreach, and education. Field workers were employed and supervised within Alameda County by the community-based organization Cal-PEP; all remaining field workers were staff of the LHDs.

Field workers received training in the research protocol and safety considerations. Prior to the start of data collection, OA and the City and County of San Francisco, AIDS Office and STD Prevention and Control, organized and conducted two training sessions. The first training session involved discussions of research objectives, methodology, procedures for blood and urine collection, labeling, and storage, and safety issues. During this session an Interviewer’s Guide was reviewed and distributed to field staff. The second training session consisted of an extensive review of specimen labeling procedures to ensure confidentiality and the ability to link testing and questionnaire data. In addition, the research objectives of each item on the questionnaire were discussed, along with potential probes and sources of measurement error.

Additional training included: 1) procedures for accidental needle stick, 2) mace and pepper spray, 3) self defense, 4) crime prevention, 5) phlebotomy, 6) child and elder abuse, 7) STDs, 8) perinatal HIV, and 9) sexual assault education. Furthermore, OA

conducted regular site visits to the participating sites at which time the survey methodology and protocol for administering the survey instrument were reviewed with new field workers.

Field staff worked in pairs when in the field. Block scouting and enumeration by field workers occurred during evening and weekend hours. Some sites provided staff with cellular phones and/or pagers to communicate with the project coordinators or public safety personnel if necessary.

Developing and Pretesting the Questionnaire

The initial draft of the survey instrument was developed by OA. Field workers, community representatives, the principal investigators, and the chief of the City and County of San Francisco STD Prevention and Control reviewed subsequent drafts of the questionnaire. All reviewers were given the opportunity to make recommendations for improving the instrument. These recommendations included the wording or phrasing of questions, the addition of new measures, and Spanish translation. In addition, prior to the start of data collection, the questionnaire was piloted among 10 English and 10 Spanish speaking women recruited by each of the five participating LHDs. The final draft of the English version of the questionnaire appears in Appendix 1.

Community Support

Each LHD established contacts and publicized the YWS within their county. For example, outreach teams informed police departments, local businesses, community leaders, and county departments of the purpose and protocol of the YWS. In addition, contacts were made at chemical dependency centers and health clinics to refer women when necessary.

Study Design: Block Sampling, Scouting, and Enumeration

The sampling methodology of the YWS was a one-stage cluster. Within each county we identified census block groups with median household income below the 10th percentile, as determined from 1990 census data. Census block groups represent the smallest geographical area for which census data are available, and could contain up to 10 street blocks. We randomly selected 10-12 street blocks within each eligible census block group for enumeration. All women aged 18 to 29 years living in these blocks were eligible to participate in the YWS.

The next stage involved block scouting. Field workers located all potentially inhabited dwellings within each of the randomly selected street blocks. Dwellings within the

blocks were mapped out with other identifiable markers (e.g., park, a store) and information pertinent to safety concerns (e.g., the location of pay phones or houses with dogs). The street address of each dwelling was also recorded. During this stage the field workers also promoted the survey through several methods, such as flyers or discussing the benefits of the survey with young women.

The sketched map of the street block was subsequently used to systematically enumerate all potentially inhabited dwellings. Enumeration included recording the outcome of attempts to locate eligible women at each dwelling. In instances when no one answered the door of a seemingly inhabited dwelling, at least three subsequent attempts were made to establish contact with a resident. In some instances, access to groups of dwellings (e.g., an apartment complex with restricted entry) was denied by the building manager or landlord/lady. A number of techniques were then employed, including attempting to contact the owner of the building for permission to enter, or mailing postcards to each dwelling informing residents about the YWS and asking them to respond as to whether any women aged 18 to 29 years lived in the dwelling.

During the process of enumeration, potential eligible women were at times identified by a third party (e.g., mother, neighbor). Special efforts were made to subsequently contact these women by determining a date and time when they might be available, or by leaving a phone number where the field workers could be reached, for example. Given its large Asian population, San Francisco County employed a field worker fluent in Cantonese and Mandarin to assist with the enumeration process.

Once eligibility was established, women were informed of the purpose of the YWS and the remuneration available for their participation; they were then immediately invited to enroll in the survey. An appointment was scheduled for eligible women who expressed interest, but could not immediately enroll. In either case, the option of completing the survey at a location other than her residence was offered.

Informed Consent, Questionnaire Data and Specimen Collection

Written informed consent was obtained from all women prior to the formal face-to-face interviews. The informed consent form, accompanied by the Research Participant's Bill of Rights, was available in English and Spanish. If requested by the participant, a field worker read the form to her. To ensure confidentiality, women were asked only to initial the form. A second copy of the form was left with each woman for future reference.

Field workers attempted to administer the questionnaire in a location free of

distractions where questions and answers could be exchanged in a confidential setting. In some instances one field worker would entertain young children while another field worker administered the questionnaire in a separate room. If the environment of the dwelling was such that privacy during the interview would be compromised, the field workers suggested that the interview be conducted at an alternative location (e.g., another room, her car, or a nearby health center or coffee shop). Occasionally this was not possible: husbands or boyfriends would not allow their wives or girlfriends to participate unless they were present during the interview, or young children could not be left unattended. Truly candid responses to all questions were not likely obtained in these instances.

The questionnaire was administered as a personal interview in either English or Spanish. The field worker asked items on the questionnaire in sequence. It was requested of the participants that they wait until the end of the formal interview to ask specific questions related to HIV/AIDS, risk behaviors, and so forth. The field workers wrote notes in the margins of the questionnaire to remind them to revisit an issue at the end of the interview based on an incorrect response or apparent misunderstanding. These notes were also used to explain inconsistent answers, unusual responses, why a question was skipped, or other related information.

The process of obtaining written informed consent and administering the questionnaire took approximately 45 minutes. Blood was drawn via venipuncture into two redtop tubes. In those sites collecting urine, specimens were transported at 4°C in properly insulated containers.

Each LHD selected its own method for distribution of the \$50 remuneration. Some sites offered cash, while others provided gift certificates. Although each LHD allocated a portion of the money as remuneration to obtain post-test results and counseling, the amount differed across sites, from \$10 to \$25.

Monitoring Field Progress

For the enumeration process a standardized form was used across all five counties (Appendix 2). Information pertaining to the outcome of each attempt to contact residents at each dwelling, as well as the race/ethnicity, age, and reason for refusal from those eligible women, who did not wish to participate in the YWS, was recorded on these forms. The data collected on these forms allowed the field workers to monitor the progress made within each block. These data were also used to continuously track within counties the overall contact and enrollment rates. Contact rates represented the percent of dwellings where a resident was contacted in relation to all dwellings enumerated; enrollment rates were calculated by dividing the number of eligible women enrolled by the total number of

eligible women directly invited, in person or by phone, to participate in the YWS (the denominator for enrollment rates excluded women identified by a third party who were never directly contacted by a field worker).

October 31, 1997, was the date agreed upon by the coordinating committee to cease opening new blocks for enumeration. This two-month period prior to the end of the YWS was devoted first to enrolling women in the remaining enumerated blocks. Then, within-stage contact and enrollment rates from prior stages allowed for determining where to direct recruitment efforts in an attempt to increase overall contact and enrollment rates. In addition, we attempted to recruit women across all stages that initially expressed an interest but were not previously enrolled in the YWS. In some instances, women who initially refused to participate were recruited. This was due in some cases on the ability to collect a specimen for HIV antibody testing without drawing blood. In the intervening months since the YWS began, the Orasure saliva test became available. Some women who previously refused enrollment due to an expressed fear of needles decided to participate during this time. Additionally, the remuneration was increased to \$75 during this period, prompting some prior refusals to agree to enroll.

Specimen Labeling Procedures, Client Confidentiality, and Laboratory Results Disclosure

In California, syphilis, gonorrhea, and chlamydia are reportable STDs. In compliance with this law, YWS participants' names, addresses, and telephone numbers had to accompany one test tube of blood and the urine specimen. Positive test results were sent to LHD personnel, who in turn contacted the women for treatment, follow-up, and partner notification. To insure that the identifying information could not be connected to HIV test results, labeling procedures were developed using two sets of unique numbers for each woman enrolled. The unique number on the labels provided on the HIV testing laboratory slip were placed on the tube of blood to be tested for HIV antibodies and the questionnaire. This allowed the participant's HIV antibody test result to be subsequently matched with her questionnaire data. A different set of labels with a unique "study identification" number were also attached to the questionnaire, as well as to the tube of blood marked for syphilis serology and the urine specimen. Thus, the questionnaire served as the link between identifying information accompanying the syphilis and urine specimens, and the HIV test results. Completed questionnaires and initialed consent forms were kept in a locked cabinet at the LHDs. A designated LHD employee (i.e., a principal investigator or project coordinator) was responsible for linking all data. Copies of the logged test results without any identifying information were provided to each local data manager for data entry.

Each woman was given an HIV test receipt and return appointment card, and was instructed to bring them with her for result disclosure at a specific field location approximately two weeks after the interview. In cases where the participant lost her HIV test receipt, we developed procedures to ensure that she could still obtain her result: a “personal identification” code consisting of the participant’s initials, her mother’s initials, and her month and day of birth was also written on the questionnaire and the HIV lab slip. When necessary, and with the assistance of the HIV counselor, this code could be reconstructed and matched with the appropriate HIV test result.

The counties of Alameda, San Francisco, and San Mateo collected urine samples for gonorrhea and chlamydia testing. All counties collected specimens for syphilis serology and HIV antibody testing. Blood was tested for hepatitis C virus (HCV) from specimens collected within all five counties except Contra Costa. Alameda County, San Francisco County, and San Mateo County tested blood for hepatitis A virus and hepatitis B virus.

Laboratory Methods

The Abbott HIVAB HIV-1 Enzyme Immunoassay (Chicago, IL) tested one tube of blood for the presence of HIV antibodies. Repeatedly reactive specimens were confirmed by Immunofluorescence Assay (IFA) test and resolved, in the event of any discrepancy, by Western blot (WB). Only those sera confirmed by the IFA or WB were considered positive in the calculation of HIV seroprevalence.

The other tube of blood was tested for syphilis infection by the Venereal Disease Research Laboratory (VDRL) or the Rapid Plasma Reagin (RPR) tests. All reactive VDRLs and RPRs were confirmed by the micro hemagglutination assay for *Treponema pallidum* (MHA-TP).

Specimens from the counties of Alameda, San Francisco, and San Mateo were tested for both the presence of hepatitis B core antibodies (anti-HBc) by the Abbott Corzyme EIA and, if positive, for the presence of hepatitis B surface antigens (HBsAg), by the Abbott Auszyme Monoclonal EIA.

The enzyme immunoassay for the qualitative detection of antibody to HCV (anti-HCV) in human or serum plasma was the Hepatitis C Encoded Antigen (Recombinant c22-3, c200, NS5) Ortho HCV EIA 3.0. Sera that were reactive on the initial EIA were reported as having the antibody detected. We performed supplemental testing on all specimens that were repeatedly reactive for HCV antibodies to EIA. We used the Recombinant Immunoblot Assay (Chiron Corporation- Emeryville, CA and Ortho Diagnostic Systems, Raritan, New Jersey) to evaluate repeatedly reactive results obtained from the screening

assay.

Urine samples from the counties of Alameda, San Francisco, and San Mateo were tested using the Abbott Ligase Chain Reaction (LCR) for *C. trachomatis* and *Neisseria gonorrhoeae* assays.

Data Management and Statistical Analyses

The OA developed separate Epi Info entry programs for the questionnaire and laboratory data. Each LHD was responsible for data entry. Databases were shipped via a diskette to and reviewed by the OA on a quarterly basis. Key punching errors or illogical data were flagged by the OA; the local data management personnel were asked to verify these entries with the questionnaires. A log of these data errors and the outcome of the data management investigations were entered into a Microsoft Excel 5.0 spreadsheet. Data analyses were conducted using SAS Version 6.11.

RESULTS

From April 4, 1996, to January 6, 1998, field workers from the five participating LHDs enumerated 24,113 dwellings, of which 19,546 contacts were established (81.1% contact rate). During this 21-month period, 3,560 eligible women were identified and given the opportunity to participate in the YWS, of which 2,547 were enrolled (71.5% enrollment rate). Most of the following analyses represent the data from 2,543 persons; we present separately the findings for the 4 self-identified male-to-female transgendered persons. All findings presented are the results of unweighted analyses.

Demographics

The average age of the participants was 23.9 years. Except for San Mateo, the median monthly household income per county was between \$500 and \$999 (Table 1). For the complete sample, 81.8% of women reported an average monthly household income below \$2,000. The most common sources of income within the past six months included a job (46.9%); welfare, public assistance, or food stamps (36.1%); and spouse, family, or friends' income (33.5%). A total of 640 (25.2%) women stated that they were employed on a full-time basis during the previous six months.

The majority of our sample were women of color. As seen in Table 2, over one-third (37.6%) of the participants were of Hispanic ethnicity and 33.5% identified as Black/African American. The counties of San Joaquin and San Mateo had the highest proportions of Latinas, and Alameda County the highest proportion of African Americans. Whites represented 16.3% of the sample, followed by Asians (3.7%), Pacific Islanders (2.0%), and Native American (0.5%). Most (67.6%) of the participants were born in the United States; 21.7% were born in Mexico. Women born outside the United States had lived in the U.S. an average of 8.1 years.

Over half of the participants were single, never married (Table 3). During the past six months, 59.5% of the sample lived in their own house or apartment, 21.0% lived with their parents, and 5.9% reported to have lived in a sexual partner's house or apartment.

At the time the survey was conducted, 43.8% had completed less than a high school education (Table 4). Approximately two-thirds (65.0%) of the participants were mothers; mothers had a mean of 2.0 children. A smaller number (61.1%) had children presently under their care, and cared for an average of 1.9 children.

Medical History

Within the past year, the majority (92.1%) of participants received some type of health care service. The most common sources of health care visited during this period are presented in Table 5. A private doctor's office was visited most often (22.3%), followed closely by public health department (22.0%) and health maintenance organization (HMO) (21.0%). Most women paid for their health care by Medi-Cal (46.9%), cash (14.9%), or through an employer-based private insurance program (12.3%).

We assessed if the participants had ever received a pelvic ("gyn") exam by a nurse or doctor when they were not sick or pregnant. About one-fourth (23.5%) of the sample responded that they never had such an exam. To determine reasons why women do not access health care services, we asked a series of questions about the decisions to seek medical care for possible STD exposure and infection. A total of 102 women stated that a sexual partner had told them that he or she had a STD, and that they should seek medical treatment. Of these respondents, 76 (74.5%) sought medical treatment. The reasons given for non-treatment by the remaining women are shown in Table 6.

We also asked respondents if they had experienced (within the last year), for more than one week, any of the following STD-related symptoms: new vaginal discharge, foul vaginal odor, irregular spotting, severe pain or burning with sex or urination, or severe lower abdominal pain. Approximately one in four women (25.8%) reported having one or more of these symptoms. Of these women, about two-thirds (67.8%) did seek medical treatment, most from a private doctor (21.5%) and an HMO (19.0%). Of those women who chose to not access treatment, the most common reasons were self-treatment (16.6%) and financial limitations (14.1%) (Table 7).

Women were most likely to protect themselves from STDs by having only one partner (45.9%) and using condoms (44.8%). Less effective methods mentioned by fewer participants included washing after sex (13.6%), use of birth control (12.0%), selecting only "safe" partners (12.0%), and asking partners about their past partners (10.4%).

Table 8 displays the frequency of responses for the type of birth control methods ever tried by the participants; male condoms and "the pill" were the most frequent. The most common forms of birth control used during respondents' most recent intercourse were male condoms (35.9%), the pill (18.2%), and hormone injection (9.8%). More than one in ten (11.9%) women had at one time unsuccessfully tried to become pregnant for at least one year. At the time the survey was conducted, 8.9% of women were pregnant.

We asked women if they knew that treatment was available for pregnant women who are HIV-positive that reduces the chance that HIV would be transmitted to the baby: well over half (61.1%) were aware of such treatment. The majority of women (79.3%)

subsequently indicated that knowing about such treatment made them more likely to be tested for HIV antibodies.

As depicted in Figure 1, 65.2% of women had been previously tested for HIV antibodies. Rates for HIV testing among women across the five counties ranged from 55.8% for San Mateo County to more than 72% for Contra Costa and San Francisco counties. The average number of previous HIV tests among those tested was 2.6.

Drug Use Behaviors

Nearly four in ten (38.3%) women had smoked more than 100 cigarettes (five packs) within their lifetime. Of these smokers, 36.4% currently smoked more than one pack of cigarettes a day.

We present in Table 9 the percent of women who reported ever using certain drugs, within the last six months, and during sexual encounters. Over three-fourths (77.5%) of women had used alcohol, 50.5% had smoked marijuana, 15.3% had used cocaine, and 13.5% had used speed (e.g., methamphetamine). Injection of drugs was limited; about two percent of the sample had injected cocaine, speed, or heroin. In the six months prior to the survey, over half (56.0%) of the women had used alcohol, 31.3% used marijuana, 6.4% used cocaine, and 5.2% used speed. Drug use during sex was reported by 25.4% of women for alcohol, 17.9% of women for marijuana, and 3.8% and 2.8% of women for cocaine and speed, respectively.

One question specifically asked participants if they had ever injected street drugs, including steroids or vitamins, not prescribed by a doctor. As depicted in Figure 2, responses varied considerably by county. While 2.0% of women interviewed in Contra Costa and San Mateo Counties claimed to have shot drugs, 8.0% of San Francisco respondents indicated prior injection behavior. Across all five participating counties, a rate of 3.6% was found for injection drug use. The average age of first injection behavior was 18.1 years.

Fifty of the 92 (54.3%) injection drug users (IDUs) claimed they had injected drugs with needles or works that had been previously used by other people. Within the past six months, 19 (20.7%) IDUs had shared needles; of these respondents, only 15.8% had always cleaned them with bleach or alcohol before use (Table 10). A total of 18 (19.6%) IDUs reported that they had shared works with other IDUs. Of these, 27.8% had always cleaned the used works with bleach or alcohol. Twenty-five (27.2%) IDUs had used in the previous six months new needles that they knew came from a needle exchange program.

Sexual Identification and Type of Partners

The majority (91.5%) of women identified as heterosexual, followed by bisexual (3.6%), and lesbian (1.3%). Four percent ($n = 103$) of women reported never having sex with another person. Among those with a history of sexual relations, 91.5% had sex with men only, 7.8% had sex with both men and women, and 0.7% had sex with women only.

Sexual Behaviors with Men

The mean age for first vaginal intercourse was 16.2 years. Women who never received money or drugs for sex had a lifetime average of 6.8 male partners, with a mean of 1.2 male partners over the last 6 months (Table 11). The lifetime mean among women who had received money or drugs for sex was 356.4 male partners. In the past 6 months, women who had received money or drugs for sex had an average of 12.8 male partners.

Three types of male partners were described to the participants who had sex with men. “Steady” was defined as the one sex partner with whom they had a close, ongoing sexual relationship more than anyone else. “Casual” partners represented sex partners with whom they had sex occasionally but did not consider a steady partner. “New” partners constituted sex partners with whom they had sex for the first time in the past two months. Except for steady versus casual partners, these categories are not mutually exclusive. A total of 222 (8.7%) women reported current casual partners and 5.4% reported new partners. We present in Table 12 the average (mean) number of acts of vaginal intercourse and condom use during the past two months, and condom use for the most recent episode of vaginal sexual intercourse, by type of male partner. Not surprisingly, more acts of vaginal intercourse occurred, and condoms were used less often with steady partners. The rate of condom use in acts of vaginal sex with new partners (66.1%) was similar to the rate of use with casual partners’ (65.8). However, participants reported more new (mean = 5.9) than casual (mean = 3.8) partners.

A total of 500 (19.7%) women reported a history of anal intercourse. The mean age for first anal intercourse was 20.2 years. For the previous two months, the average number of acts of anal sex was limited across the partner type categories (Table 13). For the last episode of anal intercourse, less than one-fourth of the women reported condom use, regardless of type of partner. Finally, 50.4% of respondents had at one time unprotected oral

time unprotected oral sex with a man, and 34.4% of women reported unprotected oral sex.

Sexual Behaviors with Women

For the 204 (8.5%) participants reporting sex with another woman, the average number of lifetime same-sex partners was 5.7. In the previous six months, 32 (15.7%) had oral sex during their own or their partners' menstrual period. A total of, 34 (16.7%) participants shared unprotected dildos or other sex toys with female partners during vaginal and/or anal sex in the past 6 months.

Risky Sexual Behaviors

Women were asked to respond to questions concerning sexual relations with partners who would heighten their risk of exposure to HIV. Sex with an IDU was reported by 10.1% of women; 3.3% had sexual relations with an IDU within the previous six months. The lifetime average number of IDU partners among these women was 2.4. One hundred twenty four (4.9%) reported sex with a man whom they knew had sex with another man (Table 14). During the previous six months, 27 (1.1%) women reported sex with a bisexual man. The average number of bisexual partners was 1.7 for such women. Thirty-one women (1.2%) claimed to have had sex with someone with AIDS or who was HIV infected, and 9 (0.4%) respondents may have been sexually exposed to HIV within the last six months. Sex occurred with 1.3 different HIV-positive persons. We did not collect information concerning at what point respondents knew that a sexual partner carried HIV. Figure 3 illustrates that 9.4% of women surveyed across five counties stated that they had received money for drugs or sex at least once.

Sexual Violence

Figure 4 displays the percentage of women who were ever in a situation where someone threatened to use some degree of force to try to make them have sex. This figure also includes the percentage for women who were actually at one time forced to have unwanted sexual relations. These measures of sexual violence vary slightly by county; the overall rate for threatening sexual aggression was 26.6%, and 24.1% for actual sexual aggression. Notably, nearly as many women were actually forced to have sex as were threatened.

Prevention Messages

Participants were asked to tell the field workers their top three sources for HIV/AIDS prevention information. As seen in Table 15, television (66.9%), physician/nurse/clinic (41.8%), and brochures (28.9%) were mentioned most often. The field workers also recorded the HIV/AIDS prevention information sources trusted most; up to three sources

were noted on the survey instrument. There are some discrepancies between sources of HIV/AIDS prevention information and those most trusted (Table 15). Professional sources such as, a physician/nurse/clinic or AIDS program/public health outreach worker were more trusted than other sources such as television or brochures. We also asked women the types of HIV/AIDS prevention or education activities in which they had participated. Those mentioned most often were a class at school (28.1%), individual discussion (22.9%), and listening to a speaker (16.5%). Finally, one question asked for the three kinds of HIV/AIDS prevention or education activities that would be effective for someone “like you.” The top four choices were individual discussion (40.9%), a prevention workshop or support group (31.4%), a speaker at a community meeting (25.5%), and class in school (25.3%).

Attitudes and Perceptions

The final section of the questionnaire consisted of a series of attitudinal and behavior statements from which the participants were asked to indicate their level of agreement. The field workers presented the women with a card (English or Spanish) with an agreement scale -- 1 = “strongly disagree,” 2 = “disagree,” 3 = “neither disagree or agree,” 4 = “agree,” 5 = “strongly agree”. In Table 16 we present the responses by the six types of constructs measured along with their measures of reliability (Cronbach alphas). The constructs “Drug Use” and “Peers” should be interpreted with caution given their moderate alpha coefficients.

Laboratory Results

Only seven of 2,409 women (0.3%) tested positive for HIV infection (Figure 5). A total of 4 women were from Contra Costa county, while San Joaquin, San Mateo, and San Francisco each had 1 positive case. Rates of infection with gonorrhea were 0.8% (10/1,326), syphilis 0.7% (16/2,416), and chlamydia 3.1% (42/1,439). Hepatitis B antibody positivity was 8.8% (117/1,337), and a total of 0.7% (9/1,337) were Hepatitis B antigen positive. The rate of infection with Hepatitis C was 2.34% (40/1,709).

Transgendered Participants

Four YWS participants identified as male-to-female transgender. All four had been previously tested for HIV, and were tested again in this study. In addition to the seven women found to be HIV positive, three transgender participants were found to be HIV infected; two of the three knew that they were positive prior to the recent test. In terms of risk behaviors, three had injected drugs. Three had traded money or drugs for sex (one did not respond to this question). All four transgendered participants were from San Francisco County.

DISCUSSION

This population-based survey of young women residing in low-income neighborhoods in five California counties provides public health officials with important information about HIV, HBV, HCV, syphilis, gonorrhea, and chlamydia infection, and certain risk behaviors among California low-income young women.

The comparability of these results to those of previous studies varies across studies. Fullilove and colleagues conducted a population-based survey in San Francisco from 1988 to 1989 of single, unmarried men and women aged 20 to 44 years.²⁰ Among 694 women, the prevalence of HIV infection was 0.4%, which is similar to the prevalence of 0.3% found in this study. Between 1994 and 1995, Friedman and colleagues conducted a multi-stage probability sample of English-speaking 18 to 21 year olds in Bushwick, New York, and found the following prevalences among women: HIV (0%), hepatitis C (4.0%), hepatitis B (2.0%), herpes simplex type 2 (64%), and chlamydia (6.0%).²¹ The prevalence of chlamydia found in this study was roughly half that reported by Friedman.

It is interesting to compare the percentage of this population that participated in particular risk behaviors to populations in other studies. In this survey, the rate of injection drug use was found to be 3.6%. This is comparable to the 3% rate reported by Fullilove.²⁰ The percentage of women who reported having sex with a partner who injected drugs was 10.1 in this study, compared to 7% in the AMEN study. The percentage of women, who reported having had sex with an HIV infected partner was 1.2%, compared to 1% in the AMEN study.

Limitations of the Data

Interpretations of the results of this study are subject to limitations. This study included only five counties in northern California. Therefore, we cannot be certain if the characteristics of low-income young women included in this study are generalizable to all low-income young women statewide. Seventy-two percent of women contacted were enrolled in the survey. We do not know if the remaining 28% differed in their STD/HIV prevalences and related behaviors. For example, given the high rates of HIV testing among this population, women who refused to participate may have already known they were infected with HIV. Consequently, our prevalence estimates may be underestimates of the true values. Other population-based surveys report enrollment rates of 64%¹⁹ and 86%.²⁰ In addition, we were unable to collect a urine specimen from women in two of the five participating local health jurisdictions to determine positivity of chlamydia and gonorrhea infections and assess any association with HIV, HBV, and HCV infections.

Despite these limitations, the data indicate that some low-income young women are infected with HIV and other STDs and their behaviors may contribute to making STDs a major health problem in this population.

Future Research in Women

Much work remains to be done to complete our understanding of the dynamics of the epidemiology of infectious agents among young women. At the state and local levels, the highest priorities for epidemiological research are to gain a better understanding of the precise populations at risk of incident infections, and to use this information to direct and monitor specific prevention programs that are likely to be effective for the populations at risk. We need more behavioral epidemiological studies among young women to better understand the psychology of behavior modification to reduce the risk for acquiring infections. For young women who are already infected, the behavior changes are important to reduce or eliminate the risk of transmission. Further serosurveys and behavioral epidemiological studies should be undertaken to monitor the seroprevalences and trends of prevalent infections among young women in order to develop and monitor effectiveness of age-specific, education-specific, and culturally sensitive intervention programs, particularly for low-income young women. There is an urgent need for more extensive information regarding STD/HIV prevention among young women at risk for STD/HIV acquisition.

Implications for Public Health Prevention and Education

Nationwide, recent trends of AIDS suggest continued growth in the number of cases in women, especially for those in the South and those infected heterosexually¹. Furthermore, the literature suggests that successive cohorts of young women may be at risk for HIV infection as they reach adolescence and young adulthood. STD/HIV prevention programs must reach young women before they initiate sexual activity and drug use. As AIDS and other STDs rapidly become a major health problem for young women who are at reproductive age, this may have important consequences in terms of increased morbidity and mortality among children. Because most of these infections are asymptomatic for long periods of time, state and local public health officials must make particular efforts to reach women, especially low-income young women, for early screening and treatment. STD/HIV prevention programs and treatment services should be available and adapted to the financial circumstances of women who reside in low-income neighborhoods. STD/HIV prevention programs need to be designed based on the educational levels of the women who reside in low-income neighborhoods.

TABLES

Table 1. Estimated Monthly Household Income by County of YWS Participants, 1996-1998, Northern California (%)

	County					Total
	Alameda	Contra Costa	San Francisco	San Joaquin	San Mateo	
\$0 - \$249	8.7	3.6	8.1	5.7	6.2	6.4
\$250 - \$499	23.5	18.9	13.8	16.3	12.0	16.5
\$500 - \$999	35.9	34.2	31.4	44.4	24.7	34.6
\$1,000 - \$1,999	16.1	24.0	27.8	24.0	26.3	24.0
\$2,000 - \$2,999	7.4	6.4	8.0	4.6	15.3	8.2
\$3,000 - \$3,999	3.2	1.6	2.7	0.5	5.6	2.6
\$4,000 - \$4,999	0.3	0.9	3.0	0.3	3.0	1.5
\$5,000 or more	2.5	0.7	1.3	0.3	3.4	1.5
Don't know/Refused	2.5	10.0	3.8	4.0	3.6	4.7

Table 2. Race or Ethnicity by County of YWS Participants, 1996-1998, Northern California

	County					Total
	Alameda	Contra Costa	San Francisco	San Joaquin	San Mateo	
Hispanic	16.4	35.9	13.1	56.9	56.9	37.6
Black/African American	74.9	45.7	33.9	12.2	16.9	33.5
White (not Hispanic)	3.5	13.8	29.4	17.4	13.7	16.3
Asian	0.5	0.7	7.4	5.0	3.6	3.7
Pacific Islander	1.0	0.2	3.6	0.6	4.6	2.0
Native American	0.3	0.4	0.6	0.8	0.2	0.5
Caribbean/West Indian	0.3	0.0	0.2	0.0	0.2	0.1
Mixed	2.5	2.4	5.3	5.8	2.2	3.9
Other	0.7	0.9	6.6	1.4	1.8	2.4

Table 3. Marital Status of YWS Participants, 1996-1998, Northern California

Marital Status	%
Single/Never married	56.6
Married	23.8
Member of unmarried couple	10.2
Separated	5.4
Divorced	3.1
Widowed	0.3
Engaged	0.2

Table 4. Highest Grade Completed in School by YWS Participants, 1996-1998, Northern California

Grade	%
Less than grade school (up to 8 years)	11.4
Less than high school (up to 12 years)	32.4
High school degree or equivalency	26.5
Technical or vocational school	2.8
Some college	18.6
College degree	6.9
Some graduate school	0.7
Graduate degree	0.6

Table 5. Sources of Health Care Visited During Past Year by YWS Participants, 1996-1998, Northern California

Source	%
Private doctor's office	22.3
Public health department	22.0
Health Maintenance Organization (HMO)	21.0
Community-based clinic	20.3
Hospital, outpatient clinic	14.8
Emergency room (in a hospital)	11.0
Hospital, inpatient	7.1
Other	6.9
College/School clinic	3.4
Alternative health care	2.8
STD clinic	1.7
Urgent care clinic (not in a hospital)	1.4

Sum of percents does not equal 100 because multiple responses were allowed.

Table 6. Reasons for Not Seeking Medical Treatment After Sexual Partner Indicated He/She Had Sexually Transmitted Diseases (n=102) Stated by YWS Participants, 1998-1998 Northern California

Reasons	N	%
Did seek medical treatment	76	74.5
Did not have the money	7	6.9
Self treated	1	1.0
Didn't have the time to get treated	1	1.0
Wasn't a priority for me	3	2.9
Other/Not specified	14	13.7
TOTAL	102	100.0

Table 7. Reasons for Not Seeking Medical Treatment for Symptoms Associated with Sexually Transmitted Diseases* (*n* = 212) stated by YWS Participants, 1996-1998, Northern California

Reasons	%
Self treated	16.6
Didn't have the money	14.1
Wasn't a priority for me	12.2
Didn't have the time to get treated	9.8
Too embarrassed	3.4
Didn't know where to go to get treated	2.4
Other/Not specified	41.5

* New vaginal discharge, foul vaginal odor, irregular spotting, severe pain or burning with sex or urination, or severe lower abdominal pain

Table 8. Use of Birth Control by YWS Participants, 1996-1998, Northern California

Birth Control Method	Ever Tried (%)	Used Last Intercourse (%)
Male condom	73.7	35.9
Pill	62.1	18.2
Hormone injection	22.6	9.8
Withdrawal	18.6	3.8
Surgery (Tubes Tied)	3.1	2.9
Spermicide	15.8	2.2
Hormone implant	5.0	2.1
Intrauterine Device	4.1	1.8
Rhythm method	5.4	0.9
Diaphragm or cervical cap	4.4	0.6
Female condom	2.6	0.6
Anal sex	2.2	0.4
Wash after sex	0.3	0.3
Sponge	5.3	0.2

Sum of percents does not equal 100 because multiple responses were allowed.

Table 9. History of Drug Use Among YWS Participants, 1996-1998, Northern California

Type of Drug	% Ever Used	Used Past 6 Months (%)	"High" During Sex (%)
Alcohol	77.5	56.0	25.4
Marijuana	50.5	31.3	17.9
Cocaine	15.3	6.4	3.8
<i>Cocaine by Injection</i>	1.5	0.7	0.3
Speed	13.5	5.2	2.8
<i>Speed by Injection</i>	1.9	0.8	0.5
LSD	10.9	2.4	0.8
Heroin	4.0	1.8	1.1
<i>Heroin by Injection</i>	2.4	1.4	1.0
PCP	2.0	0.3	<0.1
Prescription Methadone	1.0	0.5	0.3
"Illicit" Methadone	0.2	0.2	<0.1

Sum of percents does not equal 100 because multiple responses were allowed.

Table 10. Use of Used Needles and Works and Frequency of Cleaning With Bleach or Alcohol, Past 6 Months by YWS Participants, 1996-1998, Northern California

	Needles (%)	Works (%)
% used after other IDUs to shoot street drugs, including steroids or hormones	20.7	19.6
% when sharing, "always" cleaned with bleach or alcohol before shooting street drugs, including steroids or hormones	15.8	27.8

Table 11. Mean Number of Male Sex Partners by Ever Received Money or Drugs for Sex in YWS Participants, 1996-1998, Northern California

	Ever Received Money or Drugs for Sex		Mean (all women)
	Yes	No	
Total number of male partners	356.4	6.8	37.8
Male partners, past 6 months	12.8	1.2	2.2
Male partners, past 2 months	5.7	1.0	1.4

Table 12. Frequency of Vaginal Intercourse During Past 2 Months and Condom Use by Type of Male Partner in YWS Participants, 1996-1998, Northern California

	Partner Type		
	Steady	Casual	New
Mean number of times having vaginal sex during past 2 months	16.0	3.8	5.9
Mean number of times condom used during vaginal sex during past 2 months (% of previous)	4.0 (25.0)	2.5 (65.8)	3.9 (66.1)
Percent of male partners using condom last time having vaginal sex	27.0	45.1	38.8

Table 13. Frequency of Anal Intercourse During Past 2 Months and Condom Use by Type of Male Partner in YWS Participants, 1996-1998, Northern California

	Partner Type		
	Steady	Casual	New
Mean number of times having anal sex during past 2 months	0.7	<0.2	0.1
Mean number of times condom used during anal sex during past 2 months	0.2	<0.2	<0.2
Percent of male partners using condom last time having anal sex	13.3	22.1	19.4

Table 14. Prevalence of Sexual Behaviors with Risky Partners in YWS Participants, 1996-1998, Northern California

Have you had sex with ...	Ever (%)	Within Past 6 Months (%)	Mean Number of Partners (Lifetime)
a person who injected street drugs, including steroids or hormones	10.1	3.3	2.4
a man who has had sex with another man	4.9	1.1	1.7
someone with AIDS or who tested HIV positive	1.2	0.4	1.3

Table 15. Sources of HIV/AIDS Prevention Information of YWS Participants, 1996-1998, Northern California

Source	Top Sources (%)	Sources Trusted Most (%)
Television	66.9	33.6
Radio	19.3	7.8
Newspaper	16.5	8.9
Magazine	17.4	8.1
Posters	7.7	3.3
Brochures	28.9	23.9
Physician/Nurse/Clinic	41.8	63.6
AIDS program/Public health outreach worker	17.5	34.1
Classes in school/Teacher	21.2	14.9
Library/Bookstore	3.6	5.7
Parent or other family member	8.8	9.8
Sexual partner(s)	2.6	2.8
Friends	14.8	7.4
Telephone hotline	1.0	2.8
Minister or Priest	0.7	1.6

Sum of percents does not equal 100 because multiple responses were allowed.

Table 16. Agreement with Attitude and Behavior Statements Among YWS Participants, 1996-1998, Northern California

Construct (Cronbach alpha coefficient) and Related Items	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Communication ($\alpha = .65$)					
You usually talk about using condoms with steady sex partners*	27.5	35.6	10.9	16.3	9.7
You usually talk about using condoms with casual sex partners*	37.9	23.6	18.4	9.4	10.8
It is easy for you to tell a steady sex partner you will not have sex without a condom*	30.7	40.1	10.5	13.4	5.2
It is easy for you to tell a casual sex partner you will not have sex without a condom*	38.7	29.2	15.6	9.3	7.2
It is easy for you to tell a sex partner what you like and don't like to do during sex*	37.2	44.7	7.4	7.8	2.9
Condom ($\alpha = .71$)					
Sex does not feel as good with a condom	15.8	23.5	20.6	28.3	11.9
Having sex with a condom is unsatisfying	20.2	33.7	21.7	18.8	5.6
Using a condom disrupts sex	25.4	37.3	17.1	17.0	3.2
Control ($\alpha = .60$)					
When you are sexually aroused, you don't want to think about having safe sex	26.0	30.3	13.0	22.0	8.7
When you are having sex you can only think about what is going on in the moment	12.4	26.9	14.9	34.4	11.4
When you are sexually aroused it is difficult for you to control your sexual behaviors	20.9	42.6	12.7	17.6	6.2
You find it difficult to limit yourself to safer sex all the time	19.0	31.6	15.7	25.9	7.8
You can get a man you're having sex with to use condoms if you want him to*	39.7	45.7	6.2	5.5	3.0
If someone you're having sex with does not want to use a condom, there is little you can do about it	41.4	33.5	9.3	11.5	4.3

Table 16. (Continued)

Construct (Cronbach alpha coefficient) and Related Items	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Drug Use ($\alpha = .49$)					
You often feel more sexual after having a few drinks	21.8	25.7	19.3	22.6	10.6
After using or shooting drugs you are more sexually responsive	33.0	19.4	32.7	9.5	5.4
If high on drugs you are less likely to use condoms	21.2	20.5	26.8	20.5	11.0
Peers ($\alpha = .51$)					
Safe sex is completely accepted by most of your friends*	33.3	34.5	16.0	10.7	5.5
Most of your friends think that condoms are too much of a hassle to use	20.6	28.9	18.8	24.7	7.0
Most of your friends think you should not have sex unless you use condoms*	21.4	34.9	20.8	16.7	6.2
Perceived Risk ($\alpha = .64$)					
Your sexual behaviors put you at risk of getting HIV (the AIDS virus)	31.7	31.4	9.9	17.3	9.7
Your sexual behaviors put you at risk of getting STDs	29.6	30.7	10.9	19.6	9.2
There is little or no chance that you could become infected with HIV or infect others, from what you do sexually*	17.1	27.0	15.6	23.6	16.7

- Subsequently recorded in reverse response order.

FIGURES

Figure 1. Percent Ever Tested for HIV by County (n=1655)

YWS Participants, Northern California, 1996-1998

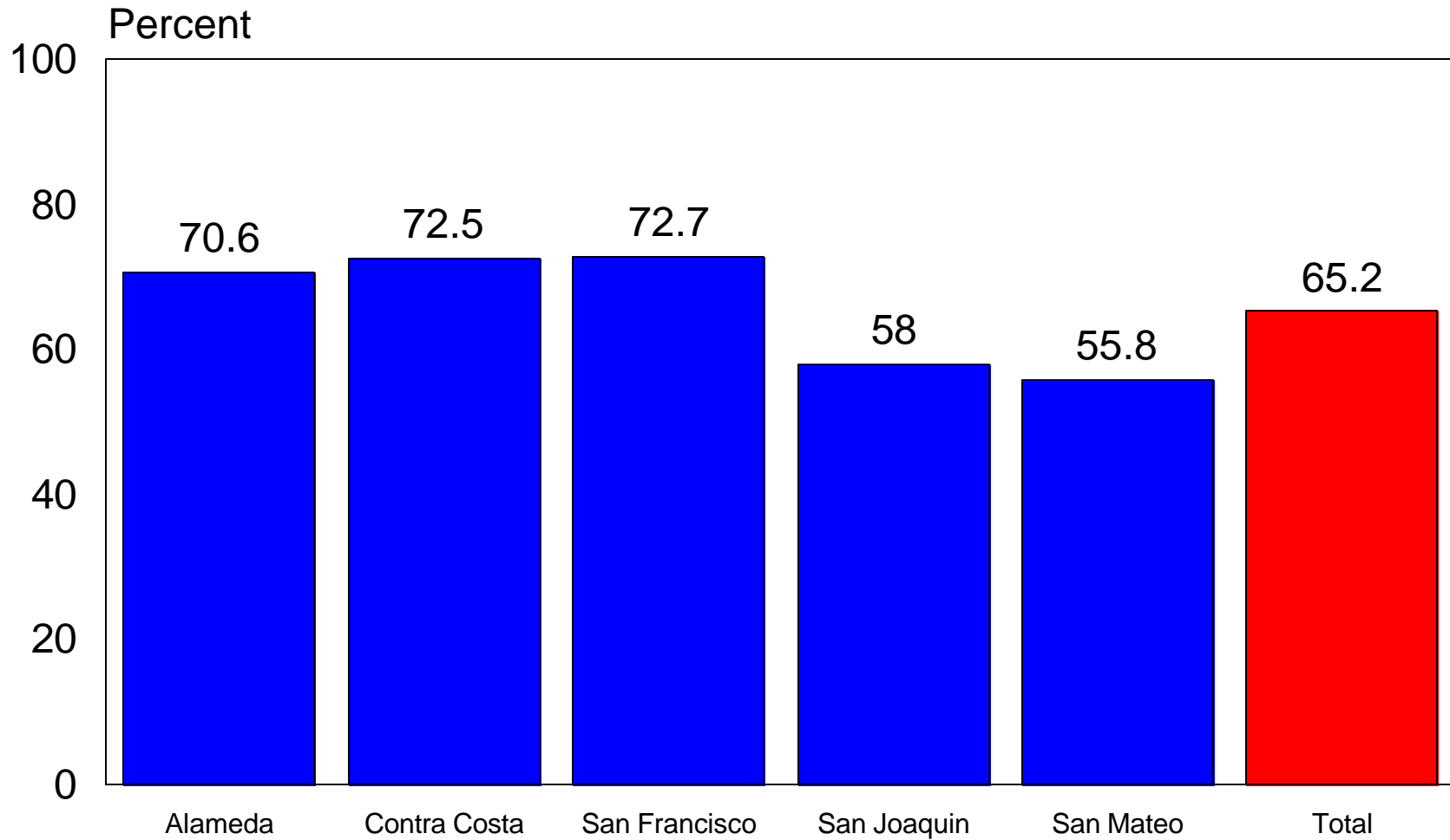


Figure 2. Percent Ever Injected Drugs by County (n=92)

YWS Participants, Northern California, 1996-1998

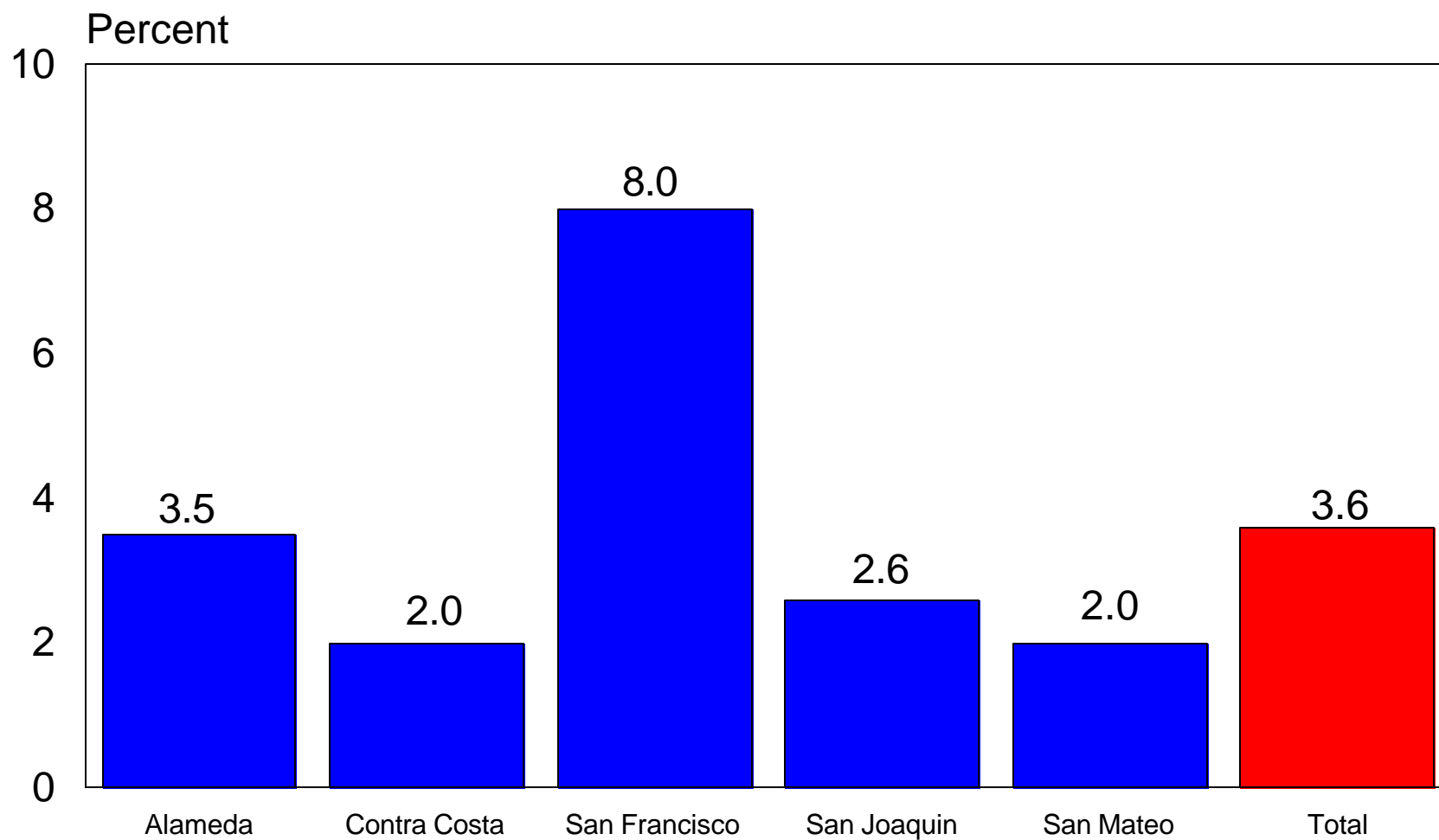


Figure 3. Percent Ever Received Money or Drugs for Sex by County (n=228)

YWS Participants, Northern California, 1996-1998

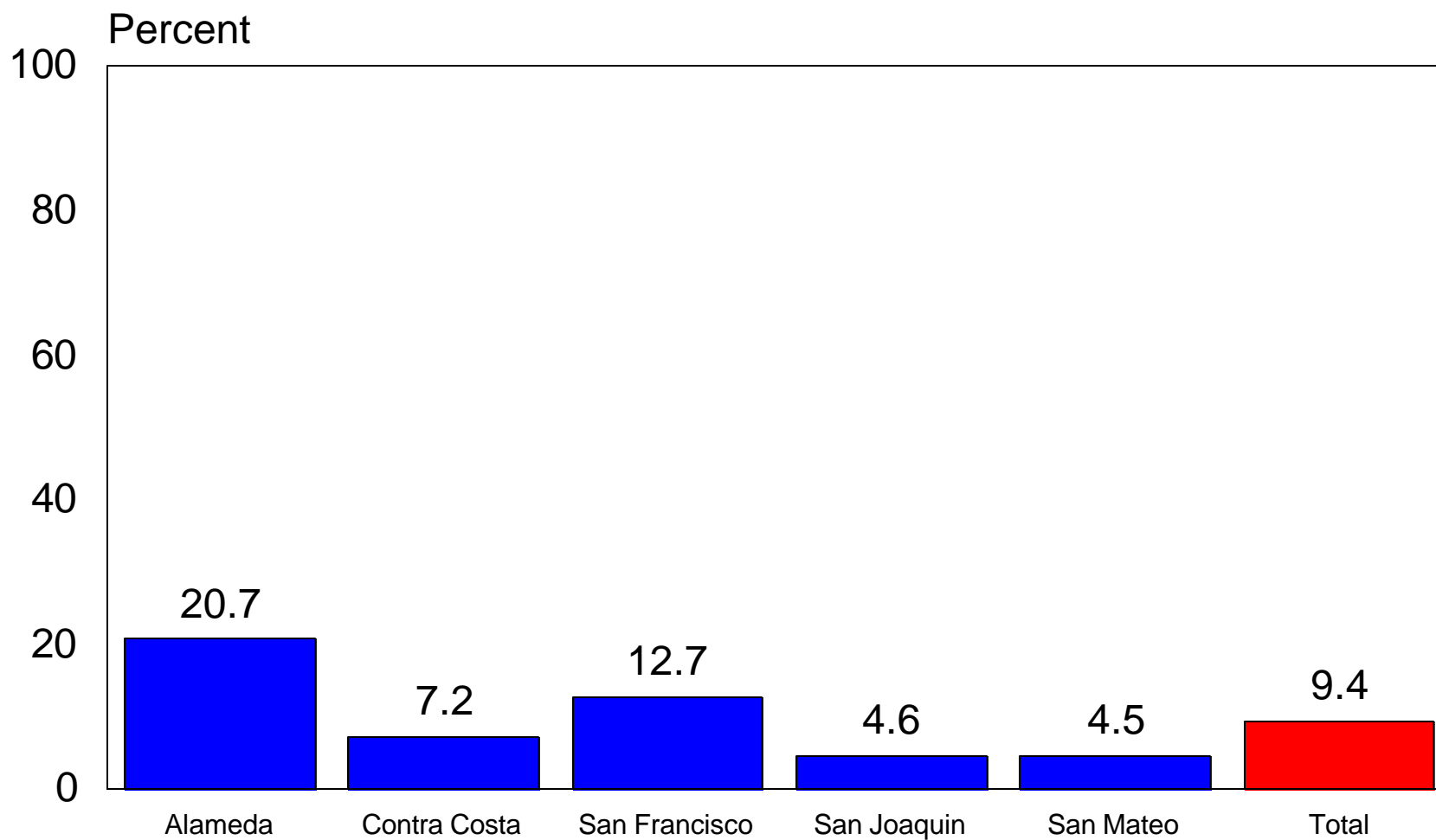


Figure 4. Percent Ever Threatened (n=676) or Actually Forced to Have Sex (n=612) by County

YWS Participants, Northern California, 1996-1998

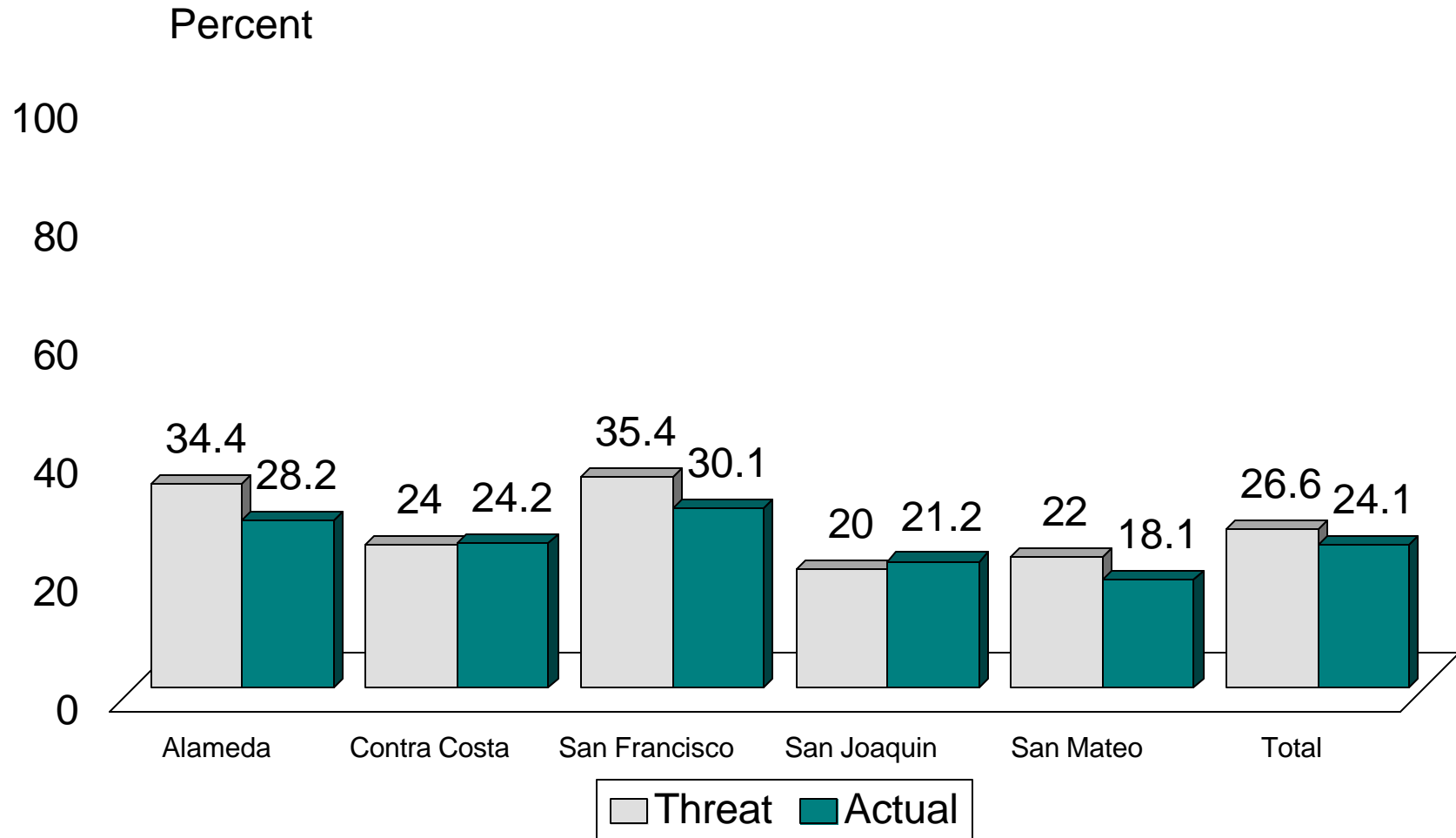
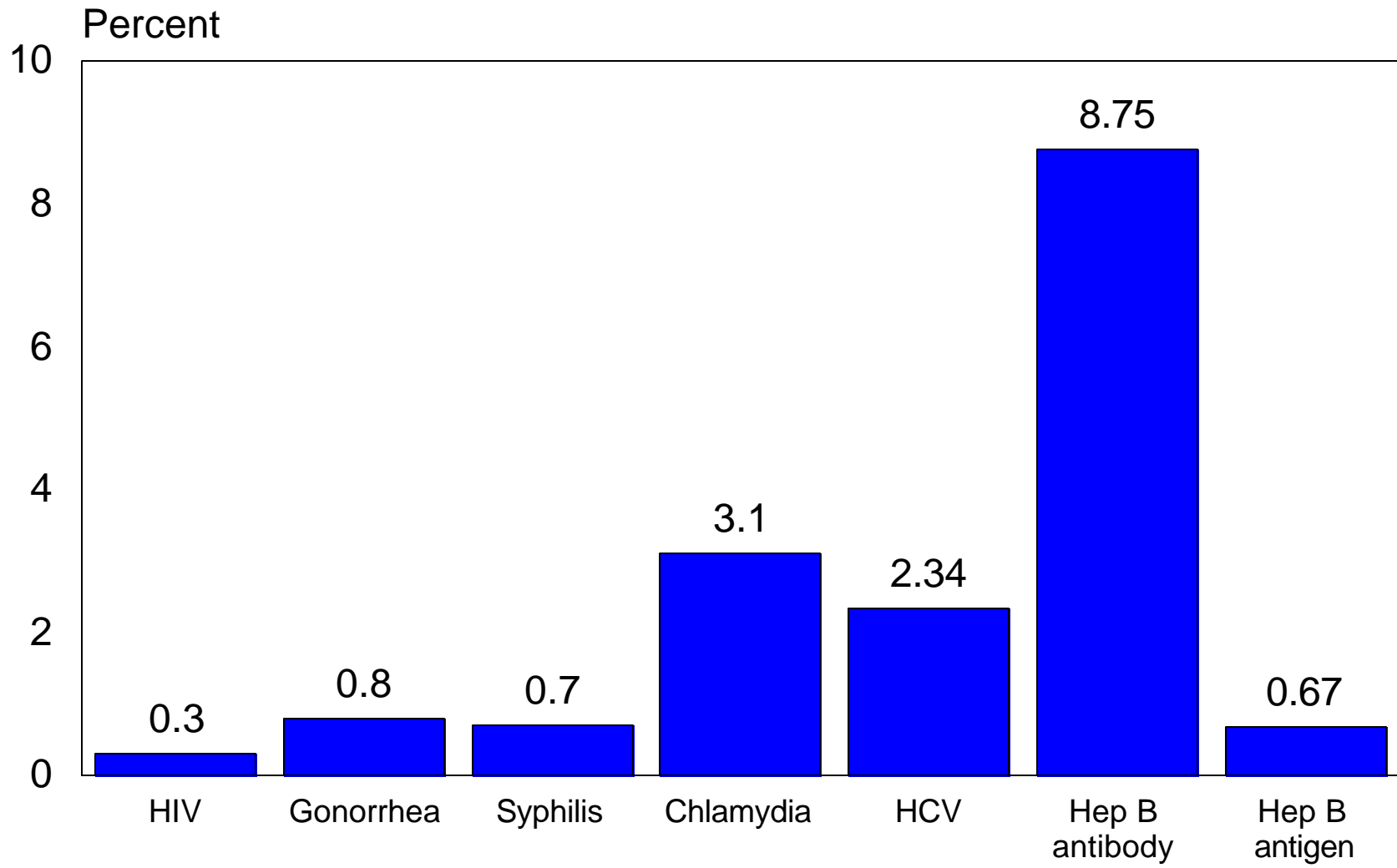


Figure 5. Infection Rates by Disease
YWS Participants, Northern California, 1996-1998



Note: All 5 counties collected specimens for HIV and syphilis, while only 4 counties collected specimens for HCV and 3 counties collected specimens for chlamydia

APPENDIX 1

**Type III Participant Enumeration/Recruitment
(Annotative Version)**

Fill out for each dwelling

(1) Block ID Survey generated (1-50)	(2) Street ID Street name.	(3) House ID Dwelling number. (Postal St. Address)	(4) Unit ID Apt/unit number. If only 1 unit then Unit number=0, else actual unit number.	(5) Woman ID Assign Id letter per woman. (A-Z) Race: W B H A NatAm Mix Other _____ Unk/declined
--	--------------------------------------	---	---	--

Fill out for each attempt to visit home

(6a) Attempt 1	(6b) Attempt 2	(6c) Attempt 3
Recruiter: _____	Recruiter: _____	Recruiter: _____
Date: _____	Date: _____	Date: _____
Time: _____	Time: _____	Time: _____
Contact made. Yes <input type="checkbox"/> No <input type="checkbox"/>	Contact made. Yes <input type="checkbox"/> No <input type="checkbox"/>	Contact made. Yes <input type="checkbox"/> No <input type="checkbox"/>
If no contact, reason: <input type="checkbox"/> No answer <input type="checkbox"/> Door closed <input type="checkbox"/> Vacant <input type="checkbox"/> Lang barrier, Lang _____ <input type="checkbox"/> Other: _____	If no contact, reason: <input type="checkbox"/> No answer <input type="checkbox"/> Door closed <input type="checkbox"/> Vacant <input type="checkbox"/> Lang barrier, Lang _____ <input type="checkbox"/> Other: _____	If no contact, reason: <input type="checkbox"/> No answer <input type="checkbox"/> Door closed <input type="checkbox"/> Vacant <input type="checkbox"/> Lang barrier, Lang _____ <input type="checkbox"/> Other: _____
If contact made, with whom:	If contact made, with whom:	If contact made, with whom:
Are there women in the household? No <input type="checkbox"/> (STOP) Yes <input type="checkbox"/>	Are there women in the household? No <input type="checkbox"/> (STOP) Yes <input type="checkbox"/>	Are there women in the household? No <input type="checkbox"/> (STOP) Yes <input type="checkbox"/>
Phone No. of contact: _____	Phone No. of contact: _____	Phone No. of contact: _____
Name and phone of potential eligible woman: Name: _____ Phone: _____	Name and phone of potential eligible woman: Name: _____ Phone: _____	Name and phone of potential eligible woman: Name: _____ Phone: _____
Notes: (e.g. whom to return, called but out of town,...)	Notes: (e.g. whom to return, called but out of town,...)	Notes: (e.g. whom to return, called but out of town,...)

Fill out for each woman

(7) Eligibility

Age: _____
 Date of Birth: _____
 Primary Residence: ☐ Yes ☐ No

Woman eligible? ☐ Yes ☐ No (STOP)

Notes: _____

If to be enrolled fill out

(8a) Enrolled

Interview Scheduled	Interview Location	Case Status	Study ID
<input type="checkbox"/> Now <input type="checkbox"/> Later Date: _____ Time: _____	<input type="checkbox"/> Here <input type="checkbox"/> CBO _____ <input type="checkbox"/> Other _____	<input type="checkbox"/> Interview Complete <input type="checkbox"/> Blood Complete <input type="checkbox"/> Urine Complete	Study Id No: _____ Questionnaire ID: _____
Notes: _____	Notes: _____	Notes: _____	Notes: _____

(8b) Not Enrolled/Refusal

Reason Not Enrolled		Attempt to convert to Enroll
<input type="checkbox"/> Previously Enrolled	<input type="checkbox"/> Afraid of Needles	<input type="checkbox"/> Yes
<input type="checkbox"/> Not Interested	<input type="checkbox"/> No Trust	<input type="checkbox"/> No
<input type="checkbox"/> Busy	<input type="checkbox"/> Other _____	<input type="checkbox"/> Enrolled later

(9) Phone Call Log

Recruiter ID	Date	Time	Notes

APPENDIX 2

**RISK ASSESSMENT QUESTIONNAIRE
SURVEY OF HIV SEROPREVALENCE
AND MARKERS FOR SYPHILIS, CHLAMYDIA, GONORRHEA,
AND HEPATITIS-B
AND ASSESSMENT OF ASSOCIATED RISK BEHAVIORS
IN YOUNG WOMEN RESIDING IN LOW INCOME CENSUS TRACTS
IN THE COUNTIES OF ALAMEDA, CONTRA COSTA,
SAN FRANCISCO, SAN JOAQUIN, AND SAN MATEO**

**Sponsored and conducted by the
California Department of Health Services**

**In collaboration with
The Alameda County Department of Health,
The Contra Costa County Department of Health,
The San Francisco County Department of Health,
The San Joaquin County Department of Health, and
The San Mateo County Department of Health.**

Interviewer's Initials: _____

Interview Date: ____/____/____
(MM/ DD/ YY)

Block ID Number: _____

Site: Alameda
 Contra Costa
 San Francisco
 San Joaquin
 San Mateo

Personal ID Code : Mother's initials: ____ ____ (2 letters)
 Woman's initials: ____ ____ (2 letters)
 Woman's month of birth: ____ ____ (2 numbers)
 Woman's day of birth: ____ ____ (2 numbers)

Place **Study ID Label** Here --->

Place **HIV-Antibody Test Label** Here --->

Woman's Date of Birth: ____/____/____

(MM/ DD/ YY)

We are now ready to begin the interview. As I mentioned, all your answers are confidential, and your name will never be associated with any answer you give. If you do not want to answer a certain question, you do not have to, but we would appreciate it if you could answer all the questions that you can.

A. DEMOGRAPHIC QUESTIONS

This first group of questions that I will ask you will help to give us an idea of your background.

1. Which one of the following BEST describes your race/ethnic background?
(read all options, check only one)

- 01. ☐ White (not Hispanic)
- 02. ☐ Black/African-American (not Hispanic)
- 03. ☐ Hispanic/Latina (Specify_____)
- 04. ☐ Asian (Specify_____)
- 05. ☐ Pacific Islander (Specify_____)
- 06. ☐ Native American (Aleut, Eskimo, American Indian)
- 07. ☐ Caribbean/West Indian
- 08. ☐ Mixed (Specify:_____)
- 09. ☐ Other (Specify_____)
- 99. ☐ Refused

2. What country were you born in?

_____ (Name of country)

- 98. ☐ Don't know
- 99. ☐ Refused

3. How long have you lived in the U.S.?

_____ Years _____ Months

- 98. ☐ Don't know
- 99. ☐ Refused

4. How long have you lived in County?

_____ Years _____ Months

98. ☐ Don't know

99. ☐ Refused

5. What is your current marital status?
(read all options, check only one)

01. ☐ Married

02. ☐ Separated

03. ☐ Divorced

04. ☐ Single/Never Married

05. ☐ Widowed

06. ☐ Member of Unmarried Couple

07. ☐ Other (Specify _____)

98. ☐ Don't know

99. ☐ Refused

6. What is the highest grade you completed in school?
(read all options, check only one)

01. ☐ Less than grade school (up to 8 years)

02. ☐ Less than high school (up to 12 years)

03. ☐ High school degree or equivalency

04. ☐ Technical or vocational school

05. ☐ Some college

06. ☐ College degree

07. ☐ Some graduate school

08. ☐ Graduate degree

98. ☐ Don't know

99. ☐ Refused

7. During the past 6 months, where did you live most of the time?
(read all options, check only one)

01. ☐ In your own house or apartment

02. ☐ In your parent's house or apartment

03. ☐ In a friend's house or apartment

04. ☐ In a sexual partner's house or apartment

05. ☐ In a hotel or rooming house

06. ☐ In a shelter or welfare boarding home

07. ☐ On the streets

- 08. ☐ In prison or jail
- 09. ☐ Shanty/Squatting
- 10. ☐ Drug treatment program
- 11. ☐ Other (Specify_____)
- 99. ☐ Refused

8. During the past 6 months, with whom have you been living?
(read all options; check all that apply)

- 01. ☐ Alone
- 02. ☐ Parents
- 03. ☐ Grandparents
- 04. ☐ Other Relatives (Specify_____)
- 05. ☐ Friends
- 06. ☐ Spouse/Domestic partner/Sex partner
- 07. ☐ Children
- 08. ☐ Other (Specify_____)
- 99. ☐ Refused

9. In the last 6 months were you....?
(read all options; check all that apply)

- 01. ☐ Employed full-time
- 02. ☐ Employed part-time
- 03. ☐ Employed sometimes
- 04. ☐ Unemployed
- 05. ☐ Other (Specify_____)
- 99. ☐ Refused

10. In the past 6 months, what were your sources of income/support?
(read all options; check all that apply)

- 01. ☐ A job
- 02. ☐ Welfare, public assistance, food stamps
- 03. ☐ Other benefits (Social Security, Disability, Unemployment)
- 04. ☐ Spouse, family, or friends' income
- 05. ☐ Alimony or child support
- 06. ☐ Sex for pay
- 07. ☐ Other (Specify_____)
- 99. ☐ Refused

11. What is your best guess of your HOUSEHOLD income last (calendar) month?

01. ☐ \$0 to \$249

02. ☐ \$250 to \$499

03. ☐ \$500 to \$999

04. ☐ \$1,000 to \$1,999

05. ☐ \$2,000 to \$2,999

06. ☐ \$3,000 to \$3,999

07. ☐ \$4,000 to \$4,999

08. ☐ \$5,000 or more

98. ☐ Don't know

99. ☐ Refused

12. How many children do you have?

_____ (Number of children)

99. ☐ Refused

13. How many of your children are presently in your care?

_____ (Number of children)

99. ☐ Refused

B. MEDICAL HISTORY QUESTIONS

Now I am going to ask you some questions about healthcare and your medical history.

14. Which of the following sources of health care have you visited in the last year? **(read all options; check all that apply)**
- 01. ☐ Public Health Department clinic (Name _____)
 - 02. ☐ Community-based clinic (non-Health Department)
 - 03. ☐ College/school clinic
 - 04. ☐ HMO (Health Maintenance Organization, like Kaiser-Permanente)
 - 05. ☐ Private doctor's office
 - 06. ☐ Hospital, outpatient clinic
 - 07. ☐ Hospital, inpatient
 - 08. ☐ STD Clinic
 - 09. ☐ Emergency room (in a hospital)
 - 10. ☐ Urgent care clinic (not in a hospital)
 - 11. ☐ Alternative health care (e.g., acupuncture, chiropractic, herbalist, homeopathic, holistic) (Specify _____)
 - 12. ☐ Other (Specify _____)
 - 13. ☐ None
 - 98. ☐ Don't know
 - 99. ☐ Refused
15. How do you pay for healthcare services most of the time? **(read all options, check only one)**
- 01. ☐ No payment
 - 02. ☐ Cash
 - 03. ☐ Medical
 - 04. ☐ Medicare
 - 05. ☐ Private insurance, job-employer-based

- 06. ☐ Private insurance, health insurance, you pay premiums
- 07. ☐ Private insurance, parents or spouse pay premiums
- 08. ☐ School based
- 09 ☐ Military/Government based
- 10. ☐ Other (Specify_____)
- 98. ☐ Don't know
- 99. ☐ Refused

16. Have you ever received a transfusion of blood or blood products since 1980?

- 01. ☐ Yes (When? _____ Month/Year)
- 02. ☐ No
- 98. ☐ Don't know
- 99. ☐ Refused

17. Have you ever been accidentally stuck with a needle/syringe that may have been previously used (for example, from a needle used at work in a hospital or clinic, from a needle lying on the ground, from a needle in the trash, etc.)?

- 01. ☐ Yes (When? _____ Month/Year)
- 02. ☐ No
- 98. ☐ Don't know
- 99. ☐ Refused

18. Has a doctor or nurse ever told you that you have or may have any of the following sexually transmitted diseases (STDs)? (**read all options; check all that apply**)

(If had more than once, check below)

- 01. ☐ Syphilis _____
- 02. ☐ Gonorrhea _____
- 03. ☐ Chlamydia _____
- 04. ☐ PID (Pelvic Inflammatory Disease) _____
- 05. ☐ Herpes _____
- 06. ☐ Genital Warts _____
- 07. ☐ Hepatitis B _____
- 08. ☐ Trichomonas _____
- 09. ☐ Other (Specify_____)

19. Within the last year, have you ever had for more than one week any of the following symptoms: new vaginal discharge; foul vaginal odor; irregular spotting; severe pain or burning with sex or urination; or severe lower abdominal pain?

- 01. ☐ Yes (Specify symptom:_____)
- 02. ☐ No
- 98. ☐ Don't Know
- 99. ☐ Refused

IF "NO" GO TO QUESTION #22

20. Did you seek medical treatment? (**read all options, check only one**)

- 01. ☐ Yes
- 02. ☐ No, didn't have the money
- 03. ☐ No, didn't know where to go to get treated
- 04. ☐ No, self treated
- 05. ☐ No, didn't have the time to get treated
- 06. ☐ No, wasn't a priority for me
- 07. ☐ No, too embarrassed
- 08. ☐ No, other (Specify_____)
- 99. ☐ Refused

IF "NO" GO TO QUESTION #22

21. Where did you seek medical treatment?
(**read all options; check all that apply**)

- 01. ☐ Public Health Department clinic (Name _____)
- 02. ☐ Community-based clinic (non-Health Department) (Name _____)
- 03. ☐ College/school clinic
- 04. ☐ HMO (Health Maintenance Organization, like Kaiser-Permanente)
- 05. ☐ Private doctor
- 06. ☐ Hospital, outpatient clinic
- 07. ☐ Hospital, inpatient
- 08. ☐ STD Clinic
- 09. ☐ Emergency room (in a hospital)
- 10. ☐ Urgent care clinic (not in a hospital)
- 11. ☐ Other (Specify_____)
- 12. ☐ None
- 98. ☐ Don't know
- 99. ☐ Refused

22. Within the last year, have any of your sexual partners told you they had a sexually transmitted disease (STD) and that you should seek medical treatment?

- 01. ☐ Yes
- 02. ☐ No
- 98. ☐ Don't Know
- 99. ☐ Refused

IF "NO" GO TO QUESTION #24

23. Did you seek medical treatment?
(read all options, check only one)

- 01. ☐ Yes
- 02. ☐ No, didn't have the money
- 03. ☐ No, didn't know where to go to get treated
- 04. ☐ No, self treated
- 05. ☐ No, didn't have the time to get treated
- 06. ☐ No, wasn't a priority for me
- 07. ☐ No, too embarrassed
- 08. ☐ No, other (Specify_____)
- 99. ☐ Refused

24. In the last 6 months, how have you protected yourself against sexually transmitted diseases (STDs)? (read all options; check all that apply)

- 01. ☐ Used condoms more
- 02. ☐ Used anal/vaginal dam
- 03. ☐ Used foam or spermicide
- 04. ☐ Douched after sex
- 05. ☐ Selected only "safe" partners
- 06. ☐ Knew partners
- 07. ☐ Asked partners about other partners
- 08. ☐ Had sex less often
- 09. ☐ Had only one partner
- 10. ☐ Avoided new partners
- 11. ☐ Asked partners about STDs
- 12. ☐ Abstained from sex
- 13. ☐ Washed anus/vagina after sex
- 14. ☐ Urinated after sex
- 15. ☐ Used birth control
- 16. ☐ Checked for sores, lesions on partner
- 17. ☐ Other (Specify_____)
- 18. ☐ No protection
- 99. ☐ Refused

25. Do you personally know anyone who is HIV-positive or has AIDS?

01. ☐ Yes
02. ☐ No
03. ☐ Maybe

98. ☐ Don't know
99. ☐ Refused

26. Do you personally know anyone who has died from HIV/AIDS?

01. ☐ Yes
02. ☐ No
03. ☐ Maybe

98. ☐ Don't know
99. ☐ Refused

27. Have you ever been tested for HIV (the AIDS virus)?

01. ☐ Yes
02. ☐ No

98. ☐ Don't know
99. ☐ Refused

IF ANSWER IS "NO," "DON'T KNOW" OR "REFUSED," GO TO QUESTION #32

28. How many times have you been tested? _____

29. Where were you tested?

(read all options; check all that apply)

01. ☐ Public facility (County clinic) (Name _____)
02. ☐ Public facility (Alternative Test Site) (Name _____)
03. ☐ Private facility (Private doctor)
04. ☐ Mobile Van
05. ☐ Planned Parenthood
06. ☐ Jail/Prison
07. ☐ Other (Specify _____)
98. ☐ Don't know
99. ☐ Refused

30. When was your last HIV test?

____/____ (Month/Year)

98. ☐ Don't know
99. ☐ Refused

31. What was your last HIV test result?

(read all options; check only one response)

- 01. ☐ HIV - positive
- 02. ☐ HIV - negative
- 03. ☐ Don't know; never returned for results
- 04. ☐ Don't know; returned for post-test counseling but chose not to be told results
- 05. ☐ Don't know; results of HIV tests were inconclusive (uncertain)
- 06. ☐ Don't know; don't remember
- 99. ☐ Refused

32. How likely do you think it is that you are HIV-positive (infected with the AIDS virus)?
(read all options, check only one)

- 01. ☐ very likely (i.e.,75-100% chance)
- 02. ☐ likely (i.e.,25-74% chance)
- 03. ☐ unlikely (i.e.,1-24% chance)
- 04. ☐ not possible (i.e.,0% chance)
- 98. ☐ Don't know
- 99. ☐ Refused

IF RESPONDENT STATES THAT SHE TESTED HIV-POSITIVE THE LAST TIME SHE WAS TESTED, THEN ASK THE FOLLOWING SERIES OF QUESTIONS, OTHERWISE GO TO QUESTION #42.

33. Have you ever received medical care for your HIV infection?

- | | |
|----------------------------------|---|
| 01. <input type="checkbox"/> Yes | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> No | 99. <input type="checkbox"/> Refused |

34. **IF ANSWER IS “NO,”** Why not? _____

35. Are you currently receiving medical care for your HIV infection?

- 01. ☐ Yes
- 02. ☐ No
- 98. ☐ Don't know
- 99. ☐ Refused

36. **IF ANSWER IS “NO,”** Why not? _____

37. **IF ANSWER IS “YES,”** Where? _____

38. Have you ever had tests for T-cells, CD-4 lymphocytes or immune function?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

39. **IF ANSWER IS “NO,”** Why not? _____

40. Have you ever received drug therapy for HIV infection (AZT, ddI, ddC) or to prevent HIV-related opportunistic infections (pentamidine, dapsone, TMP/SMX, etc.)?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

41. **IF ANSWER IS “NO,”** Why not? _____

42. Did you know that treatment is available for pregnant women who are HIV-positive (infected with the AIDS virus) that reduces the chance that HIV will be transmitted to the baby?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

43. Does knowing that treatment can reduce the risk of infecting your baby make you more or less likely to get HIV tested? (**read all options, check only one**)

01. ☐ More likely to be tested knowing treatment is available.

02. ☐ Neither more nor less likely to be tested knowing treatment is available.

03. ☐ Less likely to be tested knowing treatment is available.

98. ☐ Don't know

99. ☐ Refused

C. GYNECOLOGIC/OBSTETRIC HISTORY

These next questions that I will ask you relate to your pregnancies and your health history.

44. Are you pregnant now?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

45. Have you ever tried to become pregnant for a year and have been unsuccessful?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

46. Have you ever had a pelvic ("gyn") exam by a nurse or doctor when you were not sick or pregnant?

01. ☐ Yes (When last time? _____ Month/Year)

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

47. What method of birth control did you use during your last intercourse?
(read all options; check all that apply)

01. ☐ Do not have sex with men

02. ☐ Did not use any method

03. ☐ Condom (male)

04. ☐ Female condom

05. ☐ Pill

06. ☐ Hormone injection (Depo provera)

07. ☐ Implanted hormone (Norplant)

08. ☐ Diaphragm or cervical cap (with or without spermicide)

09. ☐ Sponge

10. ☐ Spermicide (foam, gel, suppository)

11. ☐ IUD

12. ☐ Surgery (tubes tied)

13. ☐ Rhythm method

14. ☐ Anal sex

15. ☐ Withdrawal
 16. ☐ Other (Specify _____)
 98. ☐ Don't know
 99. ☐ Refused

48. What birth control methods have you tried?
 (read all options; check all that apply)

01. ☐ Never have sex with men
 02. ☐ Never use any method
 03. ☐ Condom (male)
 04. ☐ Female condom
 05. ☐ Pill
 06. ☐ Hormone injection (Depo provera)
 07. ☐ Implanted hormone (Norplant)
 08. ☐ Diaphragm or cervical cap (with or without spermicide)
 09. ☐ Sponge
 10. ☐ Spermicide (foam, gel, suppository)
 11. ☐ IUD
 12. ☐ Surgery (tubes tied)
 13. ☐ Rhythm method, natural family planning
 14. ☐ Anal sex
 15. ☐ Withdrawal
 16. ☐ Other (Specify _____)
 98. ☐ Don't know
 99. ☐ Refused

D. DRUG, ALCOHOL, AND NEEDLE/SYRINGE USE

49. Now I'm going to ask you some questions about your drug and alcohol use. Please remember that no one will know the answers to your questions besides me, and no one will be able to trace the answers back to you.

	Ever Used		Used In Past 6 Months		High Or Buzzed On During Sex In Past 6 Months	
Alcohol	YES	NO	YES	NO	YES	NO
Marijuana/Hash	YES	NO	YES	NO	YES	NO
Speed/Amphetamines/Crank	YES	NO	YES	NO	YES	NO
Inject	YES	NO	YES	NO	YES	NO
LSD/Hallucinogens/XTC	YES	NO	YES	NO	YES	NO

Cocaine/Crack	YES	NO	YES	NO	YES	NO
Inject	YES	NO	YES	NO	YES	NO
Heroin (China White, Chiva, Red Rock)	YES	NO	YES	NO	YES	NO
Inject	YES	NO	YES	NO	YES	NO
PCP	YES	NO	YES	NO	YES	NO
Prescription Methadone	YES	NO	YES	NO	YES	NO
Non-prescription Methadone	YES	NO	YES	NO	YES	NO
Other Drug _____	YES	NO	YES	NO	YES	NO
Other Drug _____	YES	NO	YES	NO	YES	NO

50. Have you ever in your lifetime injected or shot street drugs into your veins or under your skin with a needle? This includes steroids (substances that are used clinically mainly to promote growth and repair body tissue) or vitamins, but not drugs prescribed by a doctor.

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

IF NEVER SHOT DRUGS, GO TO QUESTION #58

51. How old were you when you first injected or shot street drugs, including steroids or hormones?

_____ (Age in years)

98. ☐ Don't know

99. ☐ Refused

52. Have you EVER used needles or works that have been used by other people to shoot street drugs?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

IF THE ANSWER IS "NO", "DON'T KNOW" OR "REFUSED", GO TO QUESTION #57

53. In the last 6 months, have you used NEEDLES that have been used by other people to shoot street drugs, including steroids or hormones?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF THE ANSWER IS "NO", "DON'T KNOW", OR "REFUSED", GO TO QUESTION #55

54. In the last 6 months, when using NEEDLES that have been used by other people, how often did you clean your needles with bleach or alcohol before you shot street drugs, including steroids or hormones? **(read all options, check only one)**

01. ☐ Always

02. ☐ Almost Always

03. ☐ Sometimes

04. ☐ Almost Never

05. ☐ Never

98. ☐ Don't know

99. ☐ Refused

55. In the last 6 months, have you used WORKS that have been used by other people to shoot street drugs, including steroids or hormones?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF THE ANSWER IS "NO", "DON'T KNOW", OR "REFUSED", GO TO QUESTION #57

56. In the last 6 months, when using WORKS that have been used by other people, how often did you clean your works with bleach or alcohol before you shot street drugs, including steroids or hormones? **(read all options, check only one)**

01. ☐ Always

02. ☐ Almost Always

03. ☐ Sometimes

04. ☐ Almost Never

05. ☐ Never

98. ☐ Don't know

99. ☐ Refused

57. In the last 6 months, how often did you USE brand new needles that you know came from a needle exchange

program? (read all options, check only one)

- | | |
|--|---|
| 01. <input type="checkbox"/> Always | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> Almost Always | 99. <input type="checkbox"/> Refused |
| 03. <input type="checkbox"/> Sometimes | |
| 04. <input type="checkbox"/> Almost Never | |
| 05. <input type="checkbox"/> Never | |

58. Have you smoked over 100 cigarettes (5 packs) in your life?

- | | |
|----------------------------------|---|
| 01. <input type="checkbox"/> Yes | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> No | 99. <input type="checkbox"/> Refused |

(IF "YES," number of years smoked:_____)

(IF "YES," number of packs per day:_____)

E. SEXUAL BEHAVIOR QUESTIONS

Now I'm going to ask you some questions about sex. Please remember that no one is going to be able to trace these answers back to you. Also, please remember what I said before: some of these questions may be difficult, but I'd really appreciate it if you would be as honest as possible.

59. Have you ever had sex with another person?

- | | |
|----------------------------------|---|
| 01. <input type="checkbox"/> Yes | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> No | 99. <input type="checkbox"/> Refused |

IF NO SEX, GO TO QUESTION #100

60. During your WHOLE LIFETIME, have you had sex with:
(read all options, check only one)

- 01. ☐ Men only
- 02. ☐ Women only
- 03. ☐ Both men and women
- 99. ☐ Refused

IF SEX WITH MEN ONLY, GO TO SECTION G, QUESTION #64

F. SEXUAL BEHAVIOR QUESTIONS WITH WOMEN

So now let's talk about sex with women. I am interested in all types of women you have had sex with: steady partners, nonsteady partners, and exchange partners (i.e., women you might have had sex with in exchange for things you needed or they needed like food, shelter, drugs, or money).

61. During your WHOLE LIFETIME, with approximately how many different women have you had sex?

_____ (Number of women)

98. ☐ Don't know

99. ☐ Refused

62. In the past 6 months, have you given or received oral sex (oral-vaginal contact) during your or your partner's period (menstruation)?

01. ☐ Yes (How many times? _____)

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

63. In the past 6 months, how often did you share dildos or other sex toys with your female partners during vaginal and/or anal sex?

(read all options, check only one)

01. ☐ Always

98. ☐ Don't know

02. ☐ Almost Always

99. ☐ Refused

03. ☐ Sometimes

04. ☐ Almost Never

05. ☐ Never

IF SEX WITH WOMEN ONLY, GO TO QUESTION #100

G. SEXUAL BEHAVIOR QUESTIONS WITH MEN

So now let's talk about sex with men. By sex I am only talking about oral sex (penis in mouth), vaginal sex (penis in vagina) and anal sex (penis in butt). I am interested in all types of men you have had sex with: steady partners, non-steady partners, and exchange partners (i.e., men you might have had sex with in exchange for things you needed or they needed like food, shelter, drugs, or money).

64. During your WHOLE LIFETIME, with approximately how many different men have you had sex?

_____ (Number of male sex partners in lifetime)

98. ☐ Don't know

99. ☐ Refused

IF NO ORAL, VAGINAL, OR ANAL SEX WITH MEN, GO TO QUESTION #100

65. In the past 6 months, with how many different men have you had sex?

_____ (Number of male sex partners in past 6 months)

98. ☐ Don't know

99. ☐ Refused

66. In the past 2 months, with how many different men have you had sex?

_____ (Number of male sex partners in past 2 months)

98. ☐ Don't know

99. ☐ Refused

67. Have you ever had unprotected oral sex (penis in mouth) with a man?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF NO ORAL SEX, GO TO QUESTION #69

68. In the past 6 months, have you ever had unprotected oral sex (penis in mouth) with a man?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

69. Think back to the FIRST TIME you had vaginal sex (penis in vagina) with a man. How old were you?

_____ (Age in years)

97. ☐ Do not practice vaginal sex

98. ☐ Don't know

99. ☐ Refused

IF NO VAGINAL SEX, GO TO QUESTION #81

I am going to ask you about vaginal sex with different types of partners in the last 2 months.

(DEFINE TYPES OF PARTNERS BEFORE ASKING QUESTIONS)

A STEADY PARTNER is the one sex partner with whom you have had a close, ongoing sexual relationship with more than anyone else.

CASUAL PARTNERS are sex partners with whom you have sex with occasionally and who you do not consider a steady partner.

NEW PARTNERS are sex partners with whom you have had sex with for the first time in the past 2 months.

A STEADY PARTNER is the one sex partner with whom you have had a close, ongoing sexual relationship with more than anyone else.

70. How many times have you had VAGINAL sex with your **steady** partner in the past 2 months?

99. ☐ Refused

71. Of these, how many times did you use a condom?

99. ☐ Refused

72. The last time you had vaginal sex with your **steady** partner, did you use a condom?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

CASUAL PARTNERS are sex partners with whom you have sex with occasionally and you do not consider a steady partner.

73. How many different casual sex partners have you had sex with in the past 2 months?

99. ☐ Refused

74. How many times have you had VAGINAL sex with all your **casual** partners in the past 2 months?

99. ☐ Refused

75. Of these, how many times did you use a condom?

99. ☐ Refused

76. The last time you had vaginal sex with your **casual** partner, did you use a condom?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

NEW PARTNERS are sex partners with you have had sex with for the first time in the past 2 months.

77. How many different new partners have you had sex with in the last 2 months?

99. ☐ Refused

78. How many times have you had VAGINAL sex with all your **new** partners in the past 2 months?

99. ☐ Refused

79. Of these, how many times did you use a condom?

99. ☐ Refused

80. The last time you had vaginal sex with a **new** partner, did you use a condom?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

81. Have you ever had anal sex with a man?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF NO ANAL SEX, GO TO QUESTION #92

82. Think back to the FIRST TIME you had anal sex (penis in butt) with a man. How old were you?

_____ (Age in years)

97. ☐ Do not practice anal sex

98. ☐ Don't know

99. ☐ Refused

I am going to ask you about anal sex with different types of partners.

(DEFINE TYPES OF PARTNERS BEFORE ASKING QUESTIONS)

A STEADY PARTNER is the one sex partner with whom you have had a close, ongoing sexual relationship with more than anyone else.

83. How many times have you had ANAL sex with your **steady** partner in the past 2 months?

99. ☐ Refused

84. Of these, how many times did you use a condom?

99. ☐ Refused

85. The last time you had anal sex with your **steady** partner, did you use a condom?

01. ☐ Yes

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

CASUAL PARTNERS are sex partners with whom you have sex with occasionally and who you do not consider a steady partner.

86. How many times have you had ANAL sex with all your **casual** partners in the past 2 months?

99. ☐ Refused

87. Of these, how many times did you use a condom?

99. ☐ Refused

88. The last time you had anal sex with your **casual** partner, did you use a condom?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

NEW PARTNERS are sex partners with whom you have sex with for the first time within the past 2 months.

89. How many times have you had ANAL sex with all your **new** partners in the past 2 months?

99. ☐ Refused

90. Of these, how many times did you use a condom?

99. ☐ Refused

91. The last time you had anal sex with your **new** partner, did you use a condom?

01. ☐ Yes

98. ☐ Don't know

02. ☐ No

99. ☐ Refused

92. Have any of the men you've had sex with ever had sex with other men?

01. ☐ Yes (Have you had sex with them in past 6 months? Yes__ No__)

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF “NO” GO TO QUESTION #94

93. How many men have you had sex with that have had sex with other men?

_____ (Number of male sex partners who have had sex with other men)

98. ☐ Don't know

99. ☐ Refused

94. Have any of the people you've ever had sex with inject street drugs, including steroids or hormones?

01. ☐ Yes (Have you had sex with them in past 6 months? Yes__ No__)

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF “NO” GO TO QUESTION #96

95. How many people?

_____ (Number of sex partners injecting drugs)

98. ☐ Don't know

99. ☐ Refused

96. Have you ever had sex with someone who has/had AIDS or tested positive for the AIDS virus?

01. ☐ Yes (Have you had sex with them in past 6 months? Yes__ No__)

02. ☐ No

98. ☐ Don't know

99. ☐ Refused

IF “NO” GO TO QUESTION #99

97. How many people?

_____ (Number of sex partners with AIDS or HIV)

98. ☐ Don't know
99. ☐ Refused

98. When was the last time you had sex with someone who has AIDS or tested positive for the AIDS virus?
_____ (Month/year)

98. ☐ Don't know
99. ☐ Refused

99. Have you ever received money or drugs for sex?

01. ☐ Yes (In past 6 months? Yes__ No__)
02. ☐ No
98. ☐ Don't know
99. ☐ Refused

100. Have you ever been in a situation where someone THREATENED to use some degree of force to try to make you have sex when you didn't want to?

- | | |
|----------------------------------|---|
| 01. <input type="checkbox"/> Yes | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> No | 99. <input type="checkbox"/> Refused |

101. Have you ever been in a situation where someone ACTUALLY used some degree of force to try to make you have sex when you didn't want to?

- | | |
|----------------------------------|---|
| 01. <input type="checkbox"/> Yes | 98. <input type="checkbox"/> Don't know |
| 02. <input type="checkbox"/> No | 99. <input type="checkbox"/> Refused |

H. PREVENTION

Now I am going to ask you questions about HIV/AIDS prevention.

102. What are your top 3 sources of HIV/AIDS prevention information?
(check up to 3 responses)

01. ☐ Television
02. ☐ Radio

- 03. ☐ Newspaper
- 04. ☐ Magazine
- 05. ☐ Posters
- 06. ☐ Brochures
- 07. ☐ Physician/nurse/clinic
- 08. ☐ AIDS program/public health outreach worker
- 09. ☐ Classes in school/teacher
- 10. ☐ Library/bookstore
- 11. ☐ Parent or other family member
- 12. ☐ Sexual partner(s)
- 13. ☐ Friends
- 14. ☐ Telephone hotline
- 15. ☐ Minister or priest
- 16. ☐ No place
- 17. ☐ Other (Specify _____)
- 98. ☐ Don't know
- 99. ☐ Refused

103. What 3 sources of HIV/AIDS prevention information do you trust the most?
(check up to 3 responses)

- 01. ☐ Television
- 02. ☐ Radio
- 03. ☐ Newspaper
- 04. ☐ Magazine
- 05. ☐ Posters
- 06. ☐ Brochures
- 07. ☐ Physician/nurse/clinic
- 08. ☐ AIDS program/public health outreach worker
- 09. ☐ Classes in school/teacher
- 10. ☐ Library/bookstore
- 11. ☐ Parent or other family member
- 12. ☐ Sexual partner(s)
- 13. ☐ Friends
- 14. ☐ Telephone hotline
- 15. ☐ Minister or priest
- 16. ☐ No place

- 17. ☐ Other (Specify _____)
- 98. ☐ Don't know
- 99. ☐ Refused

104. What kinds of HIV/AIDS prevention or education activities have you participated in?
(check all that apply)

- 01. ☐ Prevention workshop
- 02. ☐ Listen to a speaker at a community meeting
- 03. ☐ Church discussion group
- 04. ☐ Street outreach/condom distribution/information/bleach distribution
- 05. ☐ Individual discussion with an outreach worker, counselor or nurse
- 06. ☐ AIDS information table at health fair
- 07. ☐ Class in school
- 08. ☐ Other (Specify _____)
- 09. ☐ Support group
- 10. ☐ Needle exchange
- 98. ☐ Don't know
- 99. ☐ Refused

105. What 3 kinds of HIV/AIDS prevention or education activities would be effective for someone like yourself?
(check up to 3 responses)

- 01. ☐ Prevention workshop or support group
- 02. ☐ Listen to a speaker at a community meeting
- 03. ☐ Church discussion group
- 04. ☐ Street outreach/condom distribution/bleach distribution
- 05. ☐ Needle exchange
- 06. ☐ Health fair
- 07. ☐ Individual discussion with an outreach worker, counselor or nurse
- 08. ☐ AIDS information table at health fair
- 09. ☐ Class in school
- 10. ☐ Peer education by family or friend
- 11. ☐ Other (Specify _____)
- 98. ☐ Don't know
- 99. ☐ Refused

I. ATTITUDES AND BEHAVIORS

PROVIDE CARD 1 TO PARTICIPANT AND EXPLAIN SCALE

These statements reflect different attitudes toward sexuality. Refer to Card 1 for each statement and identify one number that best represents how strongly you agree or disagree. Please answer quickly giving your first "gut reaction".

CIRCLE THE APPROPRIATE NUMBER

- | | | | | | | |
|------|---|-----|---|---|---|---|
| 106. | You usually talk about using condoms with steady sex partners..... | 1 | 2 | 3 | 4 | 5 |
| 107. | You usually talk about using condoms with casual sex partners..... | 1 | 2 | 3 | 4 | 5 |
| 108. | When you are sexually aroused, you don't want to think about having safe sex..... | 1 2 | 3 | 4 | 5 | |
| 109. | You often feel more sexual after having a few drinks..... | 1 | 2 | 3 | 4 | 5 |
| 110. | Safe sex is completely accepted by most of your friends..... | 1 | 2 | 3 | 4 | 5 |
| 111. | Your sexual behaviors put you at risk of getting HIV (the AIDS virus)..... | 1 | 2 | 3 | 4 | 5 |
| 112. | Your sexual behaviors put you at risk of getting STDs..... | ..1 | 2 | 3 | 4 | 5 |
| 113. | When you are having sex you can only think about what is going on in the moment..... | 1 | 2 | 3 | 4 | 5 |
| 114. | Most of your friends think that condoms are too much of a hassle to use..... | 1 | 2 | 3 | 4 | 5 |
| 115. | There is little or no chance that you could become infected with HIV or infect others, from what you do sexually..... | 1 | 2 | 3 | 4 | 5 |

116. It is easy for you to tell a steady sex partner you will not have sex without a condom.....1 2 3 4 5
117. It is easy for you to tell a casual sex partner you will not have sex without a condom.....1 2 3 4 5
118. When you are sexually aroused it is difficult for to control your sexual behaviors.....1 2 3 4 5
119. After using or shooting drugs you are more sexually responsive.....1 2 3 4 5
120. Most of your friends think you should not have sex unless you use condoms.....1 2 3 4 5
121. If high on drugs you are less likely to use condoms.....1 2 3 4 5
122. Sex does not feel as good with a condom.....1 2 3 4 5
123. It is easy for you to tell a sex partner what you like and don't like to do during sex.....1 2 3 4 5
124. You find it difficult to limit yourself to safer sex all the time.....1 2 3 4 5
125. You can get a man you're having sex with to use condoms if you want him to.....1 2 3 4 5
126. Having sex with a condom is unsatisfying.....1 2 3 4 5
127. If someone you're having sex with does not want to use a condom, there is little you can do about it.....1 2 3 4 5
128. Using a condom disrupts sex.....1 2 3 4 5
129. How do you identify? (**read all options; check all that apply**)
01. ☐ Heterosexual
02. ☐ Lesbian
03. ☐ Bisexual
04. ☐ Transgender
05. ☐ Other (Specify_____)

98. ☐ Don't know
99. ☐ Refused

END OF INTERVIEW

FOR THE INTERVIEWER:

Confidence in responses

01. ☐ Very confident
02. ☐ Some doubts
03. ☐ No confidence

Written comments:

[illegible]

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